# EMERALD FIELDS RESOURCE CORPORATION 1546 Pine Portage Road Kenora, Ontario P9N 2K2 <br> (807) 468-7374, Fax (807) 468-9792 

# REPORT ON THE BRIDGES/FAIRSERVICE PROPERTY <br> Bridges-Docker Townships <br> Kenora Mining Division-10, Ontario <br> (NTS 52F/13) 

by

Alasdair J.M. Mowat C.E.T.

August 17 ${ }^{\text {th }}, 2003$

52F13SE2005 2.26137 BRIDGES

## Emerald Fields Resource Corporation BRIDGES TOWNSHIP PROPERTY Location Map



Bridges_Grid_Drillholes.wor/Aug. 2003
Scale: $1 \mathrm{~cm}=100,000 \mathrm{~m}$


Select from a list below and press its "Go" button to jump to the specified view.


The centre of your map is in: Division: Kenora Township: CRABCLAWL

Map Tools Go to Ontario View.


Pan | Identify |
| :---: |
| Alienation |

Identify
Disposition
Legend Help
http://www.claimaps.mndm.gov.on.ca/scripts/esrimap.dll?Name=MNDM\&Cmd=Pan\&Divi... 11/19/01

Property Name: Bridges/Fairservice (Game Lake)
Mineral Commodities: Gold, Silver (VMS) Zinc, Copper and rare-metal pegmatites - Tantalum, Cesium and Beryl.

Location: Bridges (G.0812) and Docker Townships (*)

- Kenora Mining Division - 10
- MNR Administrative District of Dryden
- NTS 52 F/15
- Feist Lake topographical sheet $1: 50,000-2^{\text {nd }}$ edition 1988
- Latitude 49 degrees $51^{\prime} \mathrm{N}$ by Longitude 93 degrees $40^{\prime} \mathrm{W}$
- GPS (NAD 27) $5522000 \mathrm{~m} . \mathrm{N}$ by 452000 m . E


## Access:

The Bridges/Fairservice property lies roughly midway between the communities of Kenora and Vermilion Bay, Ontario - 70 kilometres east of Kenora, lying generally north of TransCanada Highway No. 17. A network of foot and quad trails gone additional access to the prospect.

## Property Description:

The topography of the area is dominated by easterly to northeasterly trending ridges separated by moderate to steeply pluging valleys; majority of which are occupied by wet mossy/tree covered terrain in various combinations with lakes. The vegetation is a mixture of spruce, cedar and tag alders in the low and wet areas and pine, fir, poplar and white birch on higher terrains. In areas of logging (late 1999's ?), low growth bush consisting of moose maples and the other previously mentioned tree types presently obscure rock visiability.

Rock exposure, excluding the cut over areas - summer months - is about $25 \%$.

## Ownership:

Bridges/Fairservice property consists of 9 claim blocks in Bridges Twp and 1 in Docker Twp to the east totalling 10. All the blocks are contiguous, unpatented and non-leased with both surface and mining rights staked in accordance with the mining laws of Ontario.

Total claim units is $79-16$ hectare (ha) units or $+/-1,264$ ha.
The claim group is comprised of 7 claim blocks optioned from prospector Mr. Robert (Bob) Fairservice of Kenora, Ontario and 3 staked and owned 100 \% by Emerald Fields Resource Corporation (EFR). Breakdown of claim status follows;

| Township | Ownership | Claim No. | Recording Date | Comment |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Bridges | EFR | K1221211 | Aug. 20, 2000 | Fairservice Option |
| " | $"$ | K1221212 | Aug. 20, 2001 | $"$ |
| $"$ | $"$ | K1221214 | Aug. 27, 2001 | " |
| $"$ | $"$ | K1221215 | Sep. 05, 2001 | " |
| $"$ | $"$ | K1221216 | Sep. 24, 2001 | " |


| $"$ | $"$ | K1221061 | Oct. 02, 2001 | $"$ |
| :---: | :---: | :---: | :---: | :---: |
| $"$ | $"$ | K1221101 | Dec.14, 2000 | $"$ |
| $"$ | $"$ | K3009681 | Dec.12, 2002 | EFR 100\% |
| $"$ | $"$ | K3009682 | Dec.12, 2002 | $"$ |
| Docker | $"$ | K3009683 | Dec.12, 2002 | $"$ |

## Property History:

Exploration / prospecting on the property started with uranium followed by $\mathrm{Cu}-\mathrm{Zn}-\mathrm{Ag}-\mathrm{Au}$ massive sulphides and more recently volcanogenic $\mathrm{Au}-\mathrm{Ag}$ disseminated sulphide deposits. Summary:

Uranium 1949 to 1977
Mica (industrial mineral) 1952 to 1955
Base Metals - $\mathrm{Cu}-\mathrm{Zn}-\mathrm{Ag}-\mathrm{Au} 1984$ to 1990
Valcanogenic Au-Ag 1996 to 2000
Rio Algom Exploration Limited explored the property between 1984 and ' 87 for VMS (volcanogenic massive sulphides) based on the Geco Mine $\mathrm{Cu}-\mathrm{Zn}-\mathrm{Ag}-\mathrm{Au}$ deposit model located in Manitouwadge, Ontario. Using a cut grid, the following ground programmes consisted of a magnetometer, HLEM and VLF geophysical surveys; geochemistry, and geological mapping in conjunction with an eleven drill holes totalling $2,648 \mathrm{~m}$.

The property was optioned to Mill City Gold whose objective to discover a gold deposit similar to those hosted in higher-grade metamorphic terrains; such as, Hemlo in Ontario. They conducted a 10 - hole in filling drill programme between Rio Algom's previous holes (1988). They conducted and completed an IP/resistivity survey which delineated zones of anomalous chargeability. It is noted that very few of the diamond drill holes adequately tested the IP anomalies. Gold mineralization was encountered in a number of the drill holes which was not economic, at the time. The property was returned to Rio.

In 1990, Rio Algom drilled 3 additional holes to test some of their recommended targets for VMS. No economic mineralization was encountered but anomalous gold values were intersected. As in the other cases above, no further follow-up work was performed.

Tri Origin Exploration Limited in 1996, acquired the property through option and added staking. In 1997, they conducted an airborne magnetic, electromagnetic and resistivity geophysical survey. Resulting from the survey were numerous electromagnetic conductors, several magnetic high and anomalous resistivity trends. Also, during the ' 97 period, geological mapping including litho- and soil sampling were carried out. In conducting their surface program, the core for Rio Algom drill holes $90-1,-02$ and -03 were found including Mill City drill holes GL 88-01 to -10. As noted in their report, they used GPS for location - NAD 27.

Within the immediate claim group, they recommended 5 target zones. There was no further reported follow-up.

In 2001, Emerald Fields acquired the property through option and staking.

## Geology:

The geology of the Bridges / Fairservice property, also know as the Game Lake area is best
described in the "Report on the Game Lake Property: 1997 Exploration Program by Brenda MacMurray and Michael Thompson for Tri Origin Exploration Limited, dated November 27, 1997, pages 8, 9, 10 and 11." (Note: A major of the rock unit descriptions are within the confines of the property. The remainder just outside the area of interest on examining the excerpts from this report.)
-Attachment-
Tri Origin Recommendations and Conclusions: Refer to the above reference report pages 14,15, 16,17 and 18.
-Attachment-

## Discussion:

The author over the course of the last several years - Fall of 2001; Spring to Fall of 2002, and Spring and Summer of 2003 - has made geological / prospecting excursions; particularly, within the eastern end of the claim group.

As a result of this activity, supported by the previous companies assessment work files and recommendations, that a constructive exploration modeling was required to further redefine target areas of merit. To meet this requirement, the following parties are involved in the project:

Mr. Alan Raoul and Mr. Craig Ravnaas,.District Geologists, Kenora Mining Division, Ontario and the services of ZONE 14, Winnipeg, Manitoba.

ZONE 14 are providing GIS (information sheet attached) and MapInfo support. The author has and is providing the mentioned hard copies of the pervious filed assessment reports, maps et cetera in conjunction with field GPS co-ordinates. The end result is compilation of all the exploration data in 2 and 3 dimensional map format which enhances targets.

The other approach is the reassessment of the geology and mineralization by re-sampling of the drill core both left and located in the field and in core storage at the Kenora Core Library. Three analytical methods are being used: 1/. Geochemical Analysis - multi-element,
$2 /$. Whole rock - rock unit definition and
3/. Elements from the above to define decreasing / increasing mineralization. In other words, Na and Ca depletion $<1 \%, \mathrm{~K}>4 \%, \mathrm{Mg}>2 \%, \mathrm{Ba}>$ $2,000 \mathrm{ppm}$ and $\mathrm{Mn}>2,000 \mathrm{ppm}$. Input, thoughts and options provided and supported.by the staff of Kenora District Resident Geologist Office.

Portions of drill hole No. GL-88-04 - ( drill log attached) stored at the Kenora Core Library have been sampled and submitted to SGS Minerals Services, Toronto, Ontario for analysis. The two packages are ICP80-geochemical analysis- and XRF102 - whole rock (attached). Additional drill hole sampling is continuing.

The purpose of this ongoing exploration program is the continuation of Tri Origin's target recommendations and the introduction of others by the reassessment of existing drill core and exploration data - geology, geophysics and rock chemistry - to locate deposits of $\mathrm{Au}, \mathrm{Ag}, \mathrm{Cu}, \mathrm{Zn}$ and rare-metals, Ta, Cs and Beryl. The method is the use of GIS profiling technology.

## DATA SHEET

## for

Diamond Drill Hole \# GL-88-04
GPS drill hole co-ordinates (NAD 27) Zone $15-5521415.39$ N by 451896.67 E
(NAD 83-55 21629.22 N by 451896.67 E )
Claim No. K1221212
NOTE: - Core stored at the MNDM Kenora Core Library, Ontario

- Method of core/rock splitting by diamond saw wet cutting
- Assistance provided by Mr. Alan Raoul, Kenora District Geologist

| Assay/Sample \# | Metres |  | Box |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | From | To | Length | \# | Description |
| EF-GL-88-04 |  |  |  |  |  |
| -01 | 43.61 | - 44.52 | 0.91 | 8 | - Rock Unit 1 |
| -02 | 70.33 | - 71.10 | 0.77 | 12 | - " |
| -03 | 78.84 | - 79.75 | 0.91 | 14 | - " |
| -04 | 85.60 | - 89.90 | 0.30 | 15 | - " |
| -05 | 92.00 | - 92.30 | 0.30 | 16 | - " |
| -06 | 97.43 | - 97.78 | 0.35 | 17 | - Rock Unit 6A |
| -07 | 97.78 | - 98.66 | 0.88 | 17 | - " |
| -08 | 98.66 | - 100.53 | 1.87 | 17 | - " |
| -09 | 100.53 | - 101.60 | 1.07 | 17 | - " |
| -10 | 101.60 | - 102.21 | 0.61 | 17\&18 | - |
| -11 | 102.21 | - 102.87 | 0.66 | 18 | - " |
| -12 | 102.87 | - 103.70 | 0.83 | 18 | - " |
| -13 | 104.27 | - 104.79 | 0.52 | 18 | - " |
| -14 | 104.79 | - 105.50 | 0.71 | 18 | - " |
| -15 | 105.50 | - 106.21 | 0.71 | 18 | - " |
| -16 | 106.21 | - 106.51 | 0.30 | 18 | - " |
| -17 | 106.51 | - 107.35 | 0.84 | 18 | - " |
| -18 | 107.35 | - 108.00 | 0.65 | 19 | - Rock Unit 6 |
| -19 | 108.00 | - 109.00 | 1.00 | 19 | - " |
| -20 | 114.17 | - 114.52 | 0.35 | 20 | - " |
| -21 | 114.52 | - 116.49 | 1.97 | 20 | - Rock Unit 6A |
| -22 | 116.80 | - 117.93 | 1.13 | 20 | - " |
| -23 | 117.93 | - 119.44 | 1.51 | 20 | - " |
| -24 | 119.44 | - 120.00 | 0.56 | 21 | - " |
| -25 | 120.00 | - 120.88 | 0.88 | 21 | - " |
| -26 | 120.88 | - 121.18 | 0.30 | 21 | - " |
| -27 | 157.90 | - 158.25 | 0.35 | 27 | - Rock Unit 1 |
| -28 | 161.80 | - 162.20 | 0.40 | 28 | - " |
| -29 | 171.60 | - 171.90 | 0.30 | 29 | - " |

## Rock Unit Descriptions:

Unit 1 - Biotite-Feldspar-Quartz Schist
6- Quartz-Feldspar +/-Sericite, Sillimanite, Muscovite, Garnet Schist 6A- Alterated Quartz-Feldspar +/- Sericite, Sillimanite, Muscovite, Garnet Schist with visible sphalerite, pyrite and pyrrhotite

- Attachment -

Report by: Alasdair J.M. Mowat C.E.T.
Report dated: August $18^{\text {th }}, 2003$
Report dated at: Kenora, Ontario

EMRRALO FIELDS RESOURCE CORPORATION BRIDGES / FAIRSERVICE PROPERTY, KENORA
D. D. H.

GL-88-04
VERTIEA CROSS - SECTION OF
RE-SAMPLED DRILL HOLE \# GL-88-04
(CLAIM No. K.1221212)



Note:
RE-SAMPLE NO.

$$
\begin{array}{r}
E F=G L-88-04 \\
-01 \text { T0 }-29
\end{array}
$$

Rocks of the Game Lake area are part of the Archean-aged Wabigoon tectonic assemblage within the Superior Province. The property encompasses mafic to felsic metavolcanics and metasediments of the Vermilion Bay Greenstone Belt. This zone is bounded by the metasedimentary English Subprovince to the north and by the Dryberry Batholith to the south. Geology of the Game Lake area consists of several east- to northeast-striking, steeply north-dipping and south-facing rock units. The major units (Figure 3, back pocket) include mafic to felsic (mostly intermediate) metavolcanics in the north and southwest parts of the property which grade into reworked metavolcanics and metasediments in the central and eastern parts of the area. Iron formation outcrops (both siliceous oxide and sulphide types) are found scattered throughout the property. Granitic pegmatite and granite dykes and sills cut most rock units in the area and are thought to be a volatile-rich phase of the Dryberry Batholith. Rocks in this area have reached Upper Amphibolite Facies metamorphism.

The seven major rock units on the Game Lake Property (Figure 3) include the following, in order of abundance (most to least):
Intermediate Pyroclastic - This unit is a light to medium grey, ash, lapilli, crystal or most frequently bomb/block tuff with up to $15-20 \%$ mafic minerals including biotite, hornblende and occasionally magnetite. The bombs and blocks are coarser (fine to medium) grained than the ash matrix, granodioritic in composition and frequently stretched parallel to foliation. They most often have soft edges and therefore are bombs but occasionally have the more distinct or sharper edges of blocks. The intermediate pyroclastic rock is occasionally to rarely gneissic in appearance but this is most likely caused by very stretched fragments. Occasionally, the rock appears more sedimentary in nature. At intervals, alteration includes silicification and rarely potassic or chlorite alteration.

Metasediments - These are commonly biotite- or homblende-rich, occasionally muscovite-bearing or rarely garnetiferous wackes and rarely calc-silicate, quartzite and sandstone. The calc-silicate is diopside-rich and green to black in colour. Metasediments are usually light to dark grey, sometimes greenish (particularly the calc-silicate), fine to medium grained, occasionally gneissic and usually foliated. Foliation is easily seen by the alignment of micas or hornblende. Rocks that were mapped as arkosic or quartzose wackes, quartzites and sandstones could be related to felsic metavolcanics (reworked?).

Felsic Metavolcanics - This unit consists of greyish-white to light grey, frequently silicified ash, lapilli, bomb/block and rarely quartz crystal tuffs. There is occasional potassic or sericite alteration found as well. There are minor mafic minerals present, up to $5-10 \%$, and these include biotite, hornblende and rarely magnetite. The felsic metavolcanics are commonly schistose or stretched with muscovite or sericite marking the foliation, particularly in the area around Harrison Lake (Main Zone Target Area). This unit frequently appears reworked, especially in the northeast part of the property.
Granitic Pegmatite/Granite - These rocks are coarse grained and pink or rarely to occasionally white. They intrude as sills, dykes or occasionally lenses and in some cases were seen to cut across foliation. Sill and dykes are frequently either folded or boudinaged.
Iron Formation - This unit is mostly siliceous oxide iron formation with up to $70 \%$ magnetite found in outcrop. Occasionally pyrite- and pyrrhotite-rich sulphide iron formation is found. Always magnetic, these rocks are often punky and rusty with occasional hematite staining. Brecciated iron formation was also seen west of Leigh Lake with rusty fragments in a siliceous matrix. It is uncertain whether any of these units are truly iron formation. Localized and concentrated sulphide and oxide mineralization over centimeters to meters within metavolcanics and metasediments may be a more accurate description of this occurrence. Another related unit is often closely associated with iron formation on the property. This "lean iron formation" unit is a garnetiferous amphibolite and is frequently chlorite-bearing and occasionally magnetite-bearing as well.

Gabbro - This rock is medium to dark grey-green or light grey with dark green to black clots of pyroxene (augite). It is medium (to coarse) grained and occasionally amphibolitic in composition. Mafic Metavolcanics - This unit is medium to dark grey-green, fine grained and is frequently chloritic.

The three most abundant units on the Game Lake Property, intermediate pyroclastics, metasediments and felsic metavolcanics, are very likely related. The intermediate and felsic metavolcanics are probably proximal and distal (respectively) rocks of the same sequence. The metasediments could be reworked metavolcanics. Conversely, the felsic metavolcanics might be bleached and silicified metasediments. Because of the degree of metamorphism in the area and the alteration, it was difficult to determine the protoliths of the rocks. There was an outcrop in the northeast that appeared to be almost syenitic in composition. However, upon closer inspection, it was decided that it was a metavolcanic that had undergone very strong potassic alteration.

Alteration on the Game Lake Property, particularly silicification and sericitization, appears to be concentrated in the Main 7one (Target \#6, described below) and the Octopus Lake NW Area (described below). Elsewhere on the property, silicification is quite common and occurs mostly in the metavolcanics, potassic alteration and sericitization occur occasionally and chlorite and epidote alteration are rare. Potassic alteration is slightly more common in the northeast (Targets \#1 and 2 and the Northern Zone, both described below). Alteration is noted most often in the felsic metavolcanics which could indicate that these rocks are altered versions of the metasediments.

While mapping, the strike of bedding was difficult to detect due to extensive stretching of the rock units and the high grade of metamorphism. The overall strike of foliation is approximately $225-270^{\circ}$ and dip is approximately $50-70^{\circ}$ northward. In the northeast part of the property, foliation was found to strike approximately $250-270^{\circ}$ and dip $50-60^{\circ}$. In the southeast, the strike of foliation had a greater range, from $220-280^{\circ}$, averaging around $240^{\circ}$. Dips in the southeast ranged as well, from $50^{\circ}$-vertical. South of Harrison Lake, dips are steeper at $75^{\circ}$-vertical. In the north-central part of the property, around Leigh Lake, foliation ranges quite widely, from $220-310^{\circ}$ and dips are northward $40-65^{\circ}$ where measurable. However, magnetic iron formation was found throughout this area so these measurements may not be accurate. The south-central area foliation strikes $215-230^{\circ}$, slightly more southwesterly than the property average, and dips $50-80^{\circ}$. The southwest area displays strike of foliation at $215-280^{\circ}$ and dipping $35-60^{\circ}$. In the northwest, on Gordon Lake Road, particularly near the highway, the foliation direction is erratic, varying widely over a short distance. Around the northern part of Octopus Lake, the foliation appears to swing approximately east-west (to ENE-WSW). Pryslak (1976, ODM-GR130) hypothesized about a conical fold, plunging southwest and centered around Octopus Lake. This theory may explain the change in foliation in this area. Plunges of clasts within the intermediate pyroclastic were found to be $30-60^{\circ}$ along the Highway 17 in the central part of the property and approximately $45^{\circ}$ off of Experimental Lake Road in the southwest.

Generally, directions of foliation vary more in the southern part of the Game Lake Property, closer to the Dryberry Batholith. Differences in strike of foliation between the geophysically interpreted domains (Figure 3) is very subtle. Foliations may be slightly closer to southwest ( $\sim 225^{\circ}$ ) in the west than the foliations in the eastern domains which strike WSW. "

## Emerald Fields Resource Corporation BRIDGES TOWNSHIP PROPERTY

Previous Work: Target Zones, Grid \& Drilling


Bridges_Grid_Drillholes.wor/Aug. 2003

NTS 52F/13
Scale: $1 \mathrm{~cm}=200 \mathrm{~m}$
NAD 27, Zone 15

- Drillhole Collar
4.) Target Zone
(1997 Tri Origin Exploration Limited)

Results of the 1997 Game Lake exploration program show that the property has great potential. It is recommended that five target areas be considered for future work (Figure 5). These targets were selected based on a number of factors including geology, geophysical anomalies (airborne and ground), significant assays (from ddh and surface samples) and untested previous drill targets.

Northern Zone Target Area (UTM: $450550 \mathrm{mE}, 5521550 \mathrm{mN} ; 452210 \mathrm{mE}, 5522100 \mathrm{mN}$; $450670 \mathrm{mE}, 5521200 \mathrm{mN} ; 452330 \mathrm{mE}, 5521750 \mathrm{mN}$ ): Due to favourable geology, previous drilling that did not effectively test the IP and surface assay anomalies, and anomalous Au and Ag in drill core, this area warrants further investigation. Stripping and trenching are recommended around surface assay anomalies (in particular, Rio Algom's 2500 ppb Au surface showing, which must be located first) and around the untested IP anomalies. Three drill holes are also recommended to test Au anomalies at depth and to cover the untested IP. In order of priority, these are:

A (to test IP and Au ) $\mathrm{L} 32+00 \mathrm{E}, 2+00 \mathrm{~N}$, UTM: $451450 \mathrm{mE}, 5521660 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 250 m

B (to test IP) L29+00E, $3+00 \mathrm{~N}$, UTM: $451120 \mathrm{mE}, 5521660 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 200 m

C (to test Au ) L36+50E, $2+00 \mathrm{~N}$, UTM: $451890 \mathrm{mE}, 5521800 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 250 m

Main Zone Target Area (Target \#6, UTM: $445000-450400 \mathrm{mE}, 5520500 \mathrm{mN}$; 451 $190 \mathrm{mE}, 5520500 \mathrm{mN}$ and $450000-450400 \mathrm{mE}, 5521000 \mathrm{mN}$; $451035 \mathrm{mE}, 5521205 \mathrm{mN}$ ):

Favourable geology, an airbome magnetic high, multiple AEM conductors and anomalous $\mathrm{Au}, \mathrm{Ag}, \mathrm{Cu}$ and Zn in previous drilling are the criteria to show that this area warrants further investigation. Sufficient space to permit the inclusion of the minimum size criteria for an ore body was left between previous drill holes with anomalous assays. Therefore, further drilling is recommended to test IP, surface and ddh Au. In order of priority, the following drill holes are recommended:

A
L20 $+00 \mathrm{E}, 1+00 \mathrm{~S}$, UTM: $450425 \mathrm{mE}, 5520950 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 200 m

B L18+00E, $0+50 \mathrm{~S}$, UTM: $450210 \mathrm{mE}, 5520940 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 200 m

C L26+50E, $0+25 \mathrm{~S}$, UTM: $451020 \mathrm{mE}, 5521230 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 250 m

Rio BL Drill Road Target Area (UTM: $448270 \mathrm{mE}, 5520120 \mathrm{mN} ; 449600 \mathrm{mE}, 5520$ $760 \mathrm{mN} ; 449410 \mathrm{mE}, 5521120 \mathrm{mN} ; 448070 \mathrm{mE}, 5520470 \mathrm{mN}$ ): This zone is located west of the Main Zone on the Rio Algom drill road that originates where the baseline of the grid meets Hwy. 17 (just west of Stewart Lake Lodge). This area includes several diamond drill holes with anomalous assays ( $2.06 \mathrm{~g} / \mathrm{t} \mathrm{Au}, 18 \mathrm{~g} / \mathrm{t} \mathrm{Ag}, 0.71 \% \mathrm{Zn}$ ) from Rio Algom's 1986 program and anomalous grab samples ( $504 \mathrm{ppb} \mathrm{Au} ; 64.7 \mathrm{ppm} \mathrm{Ag} ; 100 \mathrm{ppm} \mathrm{Co} ; 4040 \mathrm{ppm} \mathrm{Pb} ; 7320 \mathrm{ppm} \mathrm{Zn}$ ) from Tri Origin's 1997 exploration program. A more detailed look at the geology of this area and resampling the 1986 Rio drill core (if it can be located) is recommended.

Blue Sky Target Area (UTM: $450000 \mathrm{mE}, 5521250 \mathrm{mN} ; 450450 \mathrm{mE}, 5521650 \mathrm{mN}$ ): A high airborne magnetic signature which indicated the possible presence of a fold nose and a moderate to strong AEM anomaly was the reason for the interest in this target area. The strong IP anomaly that runs through the Northern Zone may pass right through the centre of this area but the survey ends here. There is another more diffuse IP trend that passes through the southern part of this target area. No previous work has been recorded for this zone. Detailed mapping and assay sampling is recommended.

Southern Zone Target Area (UTM: $450290 \mathrm{mE}, 5520380 \mathrm{mN} ; 452350 \mathrm{mE}$, 5521120 mN ; $452270 \mathrm{mE}, 5521360 \mathrm{mN} ; 450200 \mathrm{mE}, 5520610 \mathrm{mN}$ ): This zone is located south of the Main Zone at and near the contact of the metasediments and felsic metavolcanics with the Dryberry Batholith. This zone has likely experienced the effects of contact metamorphism with the Dryberry Batholith. The area has not been effectively investigated by Rio Algom, Mill City or Noranda. Mill City's drill holes GL88-03 and GL88-08 were too short to adequately test the mineralization and IP anomalies found in this area. Mill City recommended that GL88-03 and -08 be deepened to test this target. Detailed mapping and assaying of this area is recommended. Extending the IP survey to cover this zone would also be useful to check the extent and strength of the IP targets.

There are similarities between the Game Lake Property and the Manitouwadge camp massive sulphide deposits (Geco, for example) including rock units and grade of metamorphism (upper Amphibolite Facies). Within the Manitouwadge Synform, intermediate to mafic metavolcanics are overlain by felsic metavolcanics and iron formation, which is in turn overlain by metasediments. A porphyritic granitoid body is found at the center of the synform. Many of the felsic to intermediate metavolcanic rocks have been altered to sillimanite-muscovite-quartz schist (also referred to as sericite schist). Economic to subeconomic mineralization is located within
deformed metavolcanics or iron formations (Zaleski and Peterson, 1995).
Anomalous assay results, mineralized felsic metavolcanics and a general similarity to the Manitouwadge camp contribute to make the Game Lake Property an attractive location for future exploration. Future work on the Game Lake Property should also include petrography, whole rock and rare earth element (REE) analysis of selected samples and possibly age dating of the rock units. This work would be invaluable to help sort out the sequence of deformation in the area, possible protoliths and relationships between the different units."

|  |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



Hutrinctum
chtritha
cterther
4,
rextividy thent
with

stentatis


Th why Hix



Stherts

## Sample Preparation

## Drill Core and Rocks

Stamand procedure is to dry. crush to 2 mm , riffle to a maximum split of 250 g and mill in chrome steel equipment to 75 un (200:t). See code PG205.

Clients are billed for the use of silica sand cleaners between samples to minimize the risk of contamination from mineralized samples. When cleaners are not required, specify that PPCL be eliminated.
Large ring mills are used to prepare 1-2kg pulps (PP10, PP20), primarily to improve sample representivity for gold projects.

The reduction of samples by crushing and grinding cannot be accomplished without a degree of adulteration with wear material from the grinding surfaces of the equipment. SGS Geochemical Laboratories uses a variety of equipment with different potential contaminants:

Chrome steel

- Fe cup to $0.15^{\circ}$ ) - Criup to 150 ppm?
- Traces Mn, Si, C. V

Tungsten carbide

- W. Co, C

Agate

- $\mathrm{SiO}_{2}$ (up to $03^{\circ}$ )

The amount of adulterant is a function of grinding time and hardness of the sample. Please specify instructions suitable for your project.

## Other Preparation Services




## Geochemical Analysis

Elements and detection limits
Method
ICP70
Aqua
Regia
Digestion

| Aluminum | Al |
| :--- | :--- |
| Antimony | Sb |
| Arsenic | As |
| Barium | Ba |
| Beryllium | Be |
| Bismuth | Bi |
| Cadmium | Cd |
| Calcium | Ca |
| Chromium | Cr |
| Cobalt | Co |
| Copper | Cu |
| Iron | Fe |
| Lanthanum | La |
| Lead | Pb |
| Lithium | Li |

*. $01 \%-15 \%$

* 5 pm $-1 \%$

3 ppm-1\%
${ }^{*} 1 \mathrm{ppm}-1 \%$
$.5 \mathrm{ppm}-2500 \mathrm{ppm}$ $5 \mathrm{ppm}-1 \%$ $1 \mathrm{ppm}-1 \%$
*. $01 \%-15 \%$
${ }^{*} 1 \mathrm{ppm}-1 \%$
1 ppm-1\%
$.5 \mathrm{ppm}-1 \%$
*. $01 \%$ - $15 \%$
${ }^{*} .5 \mathrm{ppm}-1 \%$
$2 \mathrm{ppm}-1 \%$
*1ppm-1\%
Loss on Ignition

| Magnesium | Mg | ${ }^{*} .01 \%-15 \%$ |
| :--- | :--- | :--- |
| Manganese | Mn | ${ }^{*} 2 \mathrm{ppm}-1 \%$ |
| Mercury | Hg | ${ }^{* *} 1 \mathrm{ppm}-1 \%$ |

$\begin{array}{ll}\text { Mercury } & \mathrm{Hg} \\ \text { Molybdenum } & \text { Mo }\end{array}$
$\begin{array}{ll}\text { Nickel } & \mathrm{Ni} \\ \text { Niobium } & \mathrm{Nb}\end{array}$

| Phosphorus | $\mathbf{P}$ | ${ }^{*} .01 \%-15 \%$ |
| :--- | :--- | :--- |
| Potassium | $\mathbf{K}$ | $* .01 \%-15 \%$ |


| Scandium | Sc | ${ }^{*} .5 \mathrm{ppm}-1 \%$ |
| :--- | :--- | :---: |
| Selenium | Se | - |


| Silicon | Si | - |
| :--- | :--- | :---: |
| Silver | Ag | $.2 \mathrm{ppm}-10 \mathrm{ppm}$ |


| Sodium | Na | ${ }^{*} .01 \%-15 \%$ |
| :--- | :--- | :---: |
| Strontium | Sr | \multirow{3}5$\mathrm{ppm}-5000 \mathrm{ppm}$ |
| Tellurium | Te | - |


| Tellurium | Te | - |
| :--- | :--- | :---: |
| Tin | Sn | $* 10 \mathrm{ppm} \cdot 1 \%$ |

Titanium $\quad \mathbf{T i} \quad * .01 \%-15 \%$

| Tungsten | $\mathbf{W}$ | ${ }^{*} 10 \mathrm{ppm}-1 \%$ |
| :--- | :--- | :--- |
| Vanadium | $V$ | $* 2 \mathrm{ppm}-1 \%$ |


| Yttrium | $\mathbf{Y}$ | $* 5 \mathrm{ppm}-1 \%$ |
| :--- | :--- | :--- |
| Zinc | $\mathbf{Z n}$ | $* .5 \mathrm{ppm}-1 \%$ |
| Zirconium | $\mathbf{Z r}$ | $* .5 \mathrm{pmm}-1 \%$ |

Price per sample:

| Opopement: | S3.85 |
| :---: | :---: |
| Emeradmondamment | :. $\quad \$ 1.65$ |
| All elements: | \$8.95 |
| Hy add-on: | $\cdots{ }^{-} \mathrm{C} 70 \mathrm{Hg} \cdot \mathrm{S1.15}$ |
| Other add-ons: | ...s330 |



| Method | Method | Method |
| :--- | :---: | :---: |
| $\mathrm{ICP95}^{2}$ | AAH70 | AAH90 |
| $\mathrm{LiBO}_{2}$ | Aqua | $\mathrm{Na}_{2} \mathrm{O}_{2}$ |
| Fusion | Regia | Fusion/ |
|  | Digestion/ | Hydride |
|  | Hydride |  |


| $.01 \%-75 \%$ | - | - |
| :---: | :---: | :---: |
| - | $.1 \mathrm{ppm}-1000 \mathrm{ppm}$ | $0.5 \mathrm{ppm}-1000 \mathrm{ppm}$ |
| - | $.1 \mathrm{ppm}-1000 \mathrm{ppm}$ | $0.5 \mathrm{ppm}-1000 \mathrm{ppm}$ |
| $10 \mathrm{ppm}-10 \%$ | - | - |
| - | - | - |
| - | $.1 \mathrm{ppm}-1000 \mathrm{ppm}$ | $0.5 \mathrm{ppm}-1000 \mathrm{ppm}$ |


$.01 \%-90 \%$
$.01 \%-30 \%$
$.1 \mathrm{ppm}-1000 \mathrm{ppm} \quad 0.5 \mathrm{ppm}-1000 \mathrm{ppm}$

| $.01 \%-25 \%$ | - | - |
| :---: | :---: | :---: |
| - | - | - |
| - | - | - |
| $10 \mathrm{ppm}-10 \%$ | - | - |
| - | - | - |
| $10 \mathrm{ppm}-10 \%$ | - |  |


| $\$ 5.65$ | $\$ 9.65$ |
| :---: | :---: |
| 53.30 | $\$ 3.30$ |
| 517.60 | $\$ 21.85$ |

## Whole Rock Analysis

565 now wer 35 years
aponthledrepertence in the
W temmention of the major rock
components using $x$-ray
fhorescence spectronetry on a fused disc prepared from a 29 sample.
The calibration program, based on the analysis of over 40 international standard reference materials, accommodates a wide range of sample materials including chromite and bante rich materials, providing accurate and high quality data. These methods are not suitable for sulphide rich minerals.

- Method Code XRF103 is recommended for igneous petrology studies
- Volume discounts for large exploration programmes can be arranged by contractual agreement.

Classical Whole Rock Paricage
Method Code Item Samples per batin

XRF100

XRF102

XRF103

| Mars 50 alo coompo vo ko <br> Fo, WOCO PO TO essen ghton <br> Wover epontmg lm:0.01 <br> Whadum mes Ba Nh Be, S. Y, Z <br> detcionmut 2 mom Ea 20 mm: <br> Wh addonmaces Ba, We Rt, St Y Z <br> detection lmat 2 pen Ea 20 em <br> uspressedmem |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |

Samples per batich
1-50 51 plus
S 35 § 28

S $40 \quad$ S 33

S $45 \quad$ S 38

| Method Code | Elements | Method | Detection Limits | Price |
| :---: | :---: | :---: | :---: | :---: |
| CHM111 | FeO | Teration | 0.1 \% | S 14 |
| CHM112 | S | Leco | $0.01 \%$ | \$ 13 |
| CHM113 | Cl | Specific lon | 50 ppm | \$ 11 |
| CHM114 | $\mathrm{CO}_{2}$ | Coulometry | $0.01 \%$ | S 14 |
| CHM115 | $\mathrm{HO}^{+}$ | Penfiold | $0.1{ }^{0}$ | S 12 |
| CHM116 | $\mathrm{H}_{2} \mathrm{O}^{-}$ | Gravimetric | 0.1 \% | S 9 |
| CHM117 | C iorgaric: | Couiometry | $0.05{ }^{\text {a }}$ | S 18 |
| CHM118 | C (total) | Leco | $0.01 \%$ | S 14 |
| CHM119 | Citotal and S | Leco |  | S 20 |

## X-Ray Fluorescence Spectrometry

- Method Code: XRF7
- Price per sample:

One element: $\mathbf{\$ 8 . 8 0}$
Each additional element: $\mathbf{S 2 . 3 5}$
A minimum of 5 g of sample is required for this analysis. Please note that this technique is not suitable for highly mineralized samples. See page 11.
This method determines total metal concentrations using the pressed pellet technique eliminating potential dissolution problems.

| Elements |  | Detection Limits |  |
| :---: | :---: | :---: | :---: |
| Antimony | Sb | 3 | ppm - 4000 ppm |
| Arsenic | As | 3 | ppm - 4000 ppm |
| Barium | Ba | 20 | ppm - 4000 ppm |
| Bismuth | Bi | 3 | ppm - 4000 ppin |
| Cesium | Cs | 5 | ppm - 4000 ppm |
| Chromium | Cr | 5 | ppm-4000 ppm |
| Cobalt | Co | 2 | ppm-4000 ppm |
| Copper | Cu | 2 | ppm - 4000 ppm |
| Gallium | Ga | 3 | ppm - 4000 ppm |
| Lead | Pb | 2 | ppm - 4000 ppm |
| Molybdenum | Mo | 2 | ppm - 4000 ppm |
| Niobium | Nb | 2 | ppa-4000 pen |

Elements

| Nickel |  | Ni |
| :--- | :--- | :--- |
| Rubidium | Rb | $2 \mathrm{ppm}-400 \mathrm{ppm}-4000 \mathrm{pem}$ |
| Strontium | Sr | $2 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Tantalum | Ta | $5 \mathrm{ppm}-4000 \mathrm{pgm}$ |
| Thorium | Th | $2 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Tin | Sn | $5 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Titanium | Ti | $5 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Tungsten | W | $5 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Uranium | U | $2 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Ytrium | Y | $2 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Zirconium | Zr | $3 \mathrm{ppm}-4000 \mathrm{ppm}$ |
| Zinc | Zn | $2 \mathrm{ppm}-4000 \mathrm{ppm}$ |

## Mineralogical Analysis





To Intv
$9.459 .46 \mathrm{hplite}, 1 \mathrm{~cm}$ wide， $30 \%$ biotite，
104 muscovite，10\％feldspar and 50\％quartz； contacts are parallel to schistosity．
9.5212 .95 Dark green to black weakly foliated schist． Schistosity at 70 degrees to core axis．No apparent sulphides．
12.9513 .05 Quartz vein，white，massive， 10 cm wide， irregular upper and lower contacts，minor associated sulphides
13.0519 .60 Dark green to black weakly foliated schist with schistosity at 70 degrees to core axis and no apparent sulphides．Feldspar content increasing down hole to 84．
19.6021 .49 Garnet increasing from less than it to maximur of $8 *$ at 19.75 ，then decreasing down hole．The garnets appear to have been replaced by a dull， ollve．microcrystalline product．
21.4921 .90 Broken core，in 2 to 10 cm wide fragments． Carbonate exists on fracture surfaces．No apparent sulphides．
21.9021 .94 Quartz vein，massive， 4 cm wide，minor associated sulphides，sharp upper and lower contacts．
22.4023 .22 Gouge．
23.3324 .55 Silicified zone，no apparent sulphides， schistosity at 70 degrees to core axis．Minor carbonate alteration．
24.5524 .67 Pegmatite， 70 to 80\％quartz， 10 to 20\％ biotite， 5 to 10\％feldspar，no apparent sulphides．
24.6727 .00 Broken core，in 0.1 to 10 cm wide fragments． 0.2 to 0.5 cm diameter muscovite eyes exist between 25.38 and 25.70 metres．All show elongation
parallel to schistosity．Silica and muscovite increase down hole and produce a layered，banded appearance．Weak schistosity persists．
27.0030 .00 Muscovite decreases down hole；eyes exist up to 28.00 m ，then decrease．Some crystalline muscovite patchs exist（usually less than 3 cm diameter）： 1 to 2\％garnet．
30.0030 .90 Quartz veins，up to 3 cm wide，usually have gradational contacts．Muscovite eyes reappear．
30.9030 .95 Pegmatite， 5 cm wide， 30 to 504
coarse－grained feldspar，minor associated sulphides at contacts．
31.0031 .05 Pegmatite， 5 cm wide， 30 to 50\％ coarse－grained feldspar，minor associated sulphides at contacts．

MILL CITY GOLD INC.

- To
(m)
32.10 35.00 Muscovite eyes disappear at 32.20 metres; mineralogy shows 20t muscovite, lot biotite, 50 to 60t quartz. Weak schistosity formed by alignment of muscovite and biotite at 65 degrees to core axis, 1* garnet.
35.0036 .90 Carbonatization of core, some vuggy, crystalline carbonate pockets with it disseminated sulphides and 1* garnet.
36.9043 .30 Garnet increasing to 20 to $30 *$, smeared parallel to schistosity at 65 degrees to core axis. Garnet concentration produces banded texture. it magnetite throughout.
43.30 45.00 Garnet concentration drops to 17 dramatically and sulphide stringers are introduced. 2 to $3 x$
disseminated pyrite and pyrrhotite, $2 x$ magnetite Sulphides drop dramatically to trace; garnet and muscovite eyes reappear. Euhedral Garnet up to 0.3 cm diameter throughout. 3t magnetite in bands parallel to schistosity.
46.9051 .62 Silicified zone with 40 to $50 \%$ biotite, 30 to 40* quartz, 10 to 20* feldspar, minor garnet and muscovite. Schistosity is at 65 degrees to core axis. Trace to $1 \%$ finely disseminated sphalerite, pyrite, and pyrrhotite throughout.
hagnetite is finely disseminated throughout (<2x) Garnet increasing to $10 t$ in small ( $<0.1 \mathrm{~cm}$ ) crystals which are aligned with prevalent schistosity and appear smeared. Schistosity at
65 degrees to core axis.
57.5961 .29 Silicification in upper section, garnet increasing to 20t down hole.
61.2966 .00 sphalerite, trace to $1 t$ throughout in broken core in 5 to 10 cm wide sections. Garnet mineralization increased and now forms discrete bands parallel to schistosity at 65 degrees to core axis. Locally silicifled zones.
66.0072 .00 Garnet 10 to 20\%, 30 to 50* quartz, 2 to 8x feldspar, 20 to $30 *$ biotite, minor magnetite and trace disseminated sulphides. Schistosity at 65 degrees to core axis. Minor druzy carbonate veins up to 2 cm wide with no apparent sulphides occur throughout.
72.0073 .86 Garnet decreasing to 2\%. Heak schistosity at 65 degrees to core axis.
73.86 74.03 Pegmatite, 40 to $50 \%$ feldspar, 50 to 55\% quartz, no apparent sulphides.
Quartz-carbonate vein, vuggy, massive, minor
74.4074 .60 Quartz-carbonate vein, vuggy, massive, mi
74.70 76.13 sisociated sulphides, irregular contacts.
74.7076 .13 silicitied core, broken core, 1 to 4 cm wide at 75.50 in a hematitic alteration zone of competant rock.

HOLE NUMBER GL-88-04
PAGE

| Sample No. | From (m) | $\begin{aligned} & \text { To } \\ & (\mathrm{m}) \end{aligned}$ | $\begin{gathered} \text { Intv } \\ (m) \end{gathered}$ | $\lambda u$ <br> ppb | $\begin{aligned} & \text { Ag } \\ & \text { ppm } \end{aligned}$ | $\begin{aligned} & \mathrm{Cu} \\ & \mathrm{ppm} \end{aligned}$ | 2n ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80670 | 31.53 | 32.20 | . 67 | < 5 | . 5 | 38 |  |


| 80671 | 35.26 | 36.00 | .74 | $<5$ | .1 | 4 | 310 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | . | . |  |  |  |  |
| 80672 | 38.00 | 39.00 | 1.00 | $<5$ | .4 | 16 | 245 |
| 80673 | 42.08 | 42.95 | .87 | $<5$ | .5 | 4 | 115 |
| 80674 | 43.61 | 44.52 | .91 | 5 | 2.9 | 95 | 650 |
|  |  |  |  |  |  |  |  |
| 80675 | 45.00 | 46.50 | 1.50 | $<5$ | .6 | 36 | 400 |


| 80676 | 58.78 | 59.47 | .69 | $<5$ | .5 | 34 | 265 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 80677 | 63.05 | 64.06 | 1.01 | $<5$ | .8 | 39 | 228 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 80678 | 66.10 | 67.14 | 1.04 | 5 | 2.8 | 31 | 310 |
| 80679 | 70.33 | 71.10 | .77 | $<5$ | 1.2 | 24 | 1350 |

uvin 1 ire
76.1378 .00 Fragments of broken core, 1 to 18 cm wide with increased garnet. Fractures are usually carbonate filled. Dark quartz eyes up to 0.1 cm diameter throughout. Heak schistosity at 65 degrees to core axis.
78.0080 .88 Massive silicified rock with quartz eyes in a chloritic, potassic feldspar sheared matrix with almost a complete lack of schistosity and foliation. No apparent sulphides.
80.88 81.93 Increased biotita and a return of weak schistosity at 60 degrees to core axis.
81.9381 .98 Quartz-carbonate-chlorite vein. vuggy, 5 to $10 \%$ euhedral calcite, chlorite, minor quartz, minor associated sulphides.
82. 3082.67 Quartz eyes in a chloritic, potassic feldspar sheared matrix with almost a complete lack of schistosity and foliation. No apparent sulphides.
82.6785 .60 One to 34 garnet, 1 to 5 muscovite, minor sphalerite, trace magnetite. Weak schistosity at 65 degrees to core axis. Minor carbonate veins are parallel to schistosity with gradational upper and lower contacts.
85.6088 .33 Silicified core, weak to no schistosity. 2 to 8x biotite, 1 to 2t disseminated sulphides as stringers throughout.
88.33 88.48 Pegmatite, granitic, 70 to $80 \%$ orange red feldspar, 10 to 154 quartz, 2 to 5* hornblende, 2 to 5 t disseminated pyrite, 1 to 3* garnet, 2 to 5* biotite and muscovite. Gradational upper and lower contacts parallel to schistosity at 65 degrees to core axis.
88.48 89.75 Increasing biotite and muscovite with associated return of weak schistosity. Minor garnet and sulphides throughout.
89.7589 .90 Aplite, 70 to 80t quartz, 10 to 20\% muscovite and biotite at contacts. No apparent sulphides internally but sulphides increase down hole as disseminated stringers.
89.90 94.11 Biotite, up to 60t, 1 to 2 disseminated pyrite.
94.11 95.70 Pegmatite, granitić, two 10 cm lenses
of foliated country rock, 30 to $40 \%$ orange red feldspar. 30 to $40 \%$ quartz. 5 to $10 \%$ biotite, 2 to 5t muscovite, 2 to 4* garnet. Minor aulphides occur between 95.15 and 95.25 . Garnet increases to 8 within country rock lenses.
$.70 \quad 97.53$ HORNBLENDE-RICH AMPHIBOLITE (UNIT 3)
Microcrystalline, black to dark green hornblende quartz mica schist: 20 to 30\% hornblende, 40 to 60\% quartz, 10 to $15 \%$ biotite, 2 to 8t muscovite. Cood schistosity at 70 degrees to core axis. No apparent sulphides.

| 80681 | 85.84 | 86.95 | 1.11 | 15 | 5.8 | 130 | 2280 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 80682 | 88.12 | 88.56 | .44 | 5 | 4.3 | 45 | 188 |

MILL CITY GOLD INC.
HOLE NUMBER GL-88-04
PAGE

| Sample No. | From (m) | To (a) | Intv (m) | Au ppb | Ag ppm | Cu ppr | $\begin{aligned} & \mathrm{Zn} \\ & \mathrm{ppm} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80685 | 97.78 | 98.66 | . 88 | < 5 | 4.3 | 59 | 1200 |


| 80686 | 100.63 | 101.31 | . 68 | $1.75 \quad 5$ | 2,64* | 255 | 2.37\% | Alot |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 80687 | 101.60 | 102.21 | . 61 | 2315 | 4.49** | 178 | 1.15\% | 0.70 |
|  |  |  | 129 |  | 350 |  | 1.79\% |  |

MUSCOVITE, GARNET SCHIST (UNIT 6A)
Micro- to mesocrystalline, grey to light green garnetiferous schist with weak to poor schistosity at 55 to 65 degrees to core axis. 50 to 60\% quartz, 5 to 15* biotite, 20 to 40\% microcrystalilne feldspar. 5 to 25* muscovite throughout, 1 to 10\% garnet, 5 to 10\% disseminated sphalerite increasing to 40t in areas, minor epidote and chlorite. Pyrite, pyrrhotite and chalcopyrite occur as ifnely disseminated stringers parallel to schistosity.
98.1098 .90 Highly altered zone with up to 30\% garnet in
areas. Garnet appears to replace feldspar and
is itself replaced by epidote. Chlorite and epidote bands throughout. 1 to 2 tisseminated pyrite.
99.40 101.95 Increased garnet up to 40\% in sub- to euhedral crystals. Muscovite increases down hole to 5\%
101.95102 .30 Pegmatite, including a 3 cm lens of country rock. Trace to it disseminated pyrite.
102.30 103.70 Altered zone with up to 20\% garnet in areas Garnet appears to replace feldspar and is itself replaced by epidote. Chlorite and epidote bands throughout. 1 to 2 * disseminated pyrite but may be up to 5\% in 1 cm wide localities. Muscovite persistant at 5\%. Pegmatite, 40 to 45 orange red feldspar.
50 to 55\% quartz, minor muscovite and biotite. Sillimanite occurs as series of interconnected, fibrous lenses up to 0.2 cm wide.
104.12 105.05 Muscovite and disseminated pyrite increaging down hole.. Garnet replaces feldspar. Entire
section is epidotized.
105.05105 .20 Pegmatite, 30 to $35 \%$ feldspar as crystais up to 5 cm in diameter. No apparent sulphides.
105.64 106.04 Serpentinized zone with lenses and bands of massive serpentine. 1 to $3 t$ disseminated
106.55106 .61 Quartz vein, massive, phitallel to schistosity
106.55106 .61 Quartz vein, massive, white, 6 cm wide, $10 \%$ sillimanite lenses which parallel contacts and schistosity.
106.61 107.30 Sillimanite lenses parallel to schistosity. 107.30 107.35 Sillimanite lenses disappear abruptly.
17.35114 .17 QUARTZ-FELDSPAR PLUS OR MINUS SERICITE, SILLIMANITE huscovite, garnet schist (UNIT 6)
Heak to poor schistosity down hole. 40 to 55t quartz, 10 to 20\% microcrystalline feldspar, 1 to 5t garnet increasing down hole, 10 to 15t muscovite 1 to $2 \%$ finely disseminated pyrite throughout. Fairly uniform composition.
107.83107 .90 Quartz vein, dark, massive, cross-cutting schistosity, sharp upper and lower contacts with minor disseminated pyrite.
4.17125 .28 QUARTZ-FELDSPAR PLUS OR MINUS SERICITE, SILLIMANITE, MUSCOVITE, GARNET SCHIST (UNIT 6A)
Light to dark grey, micro- to mesocrystalline schist with hell davleoped schistosity at 65 degrees to core axis. 40 to
50\% quartz, 10 to 20t muscovite, 10 to 15t biotite, 1 to 15* garnet increasing downhole, trace sillimanite, 1 to 10\%
disseminated pyrite and pyrrhotite, 1 to 54 sphalerite
Magnetite increases down hole to 1\%. 1 to $2 \%$ porosity.
116.17116 .20 Quartz vein, 3 cm wide with sphalerite and pyrite concentrated at contacts. Fine stringers of muscovite and pyrite throughout.
118.03118 .05 Quartz vein, dark, 2 cm wide, irregular contacts. Pyrite and sphalerite concentrated at contacts.
118.43 118:55 Zone is intruded by irregular aphanitic to phaneritic pegmatite. Garnet increames within country rock.
119.25119 .35 Quartz vein, irregular contacts, dark. Pyrite, sphalerite concentrated at contacts; minor internal pyrite.
119.80119 .85 hplite, 5 cm wide with dark quartz and orange red feldspar, minor associated sulphides
contacts.
concentrated at contacts.
122.18122 .21 Aplite, dark quartz has garnet and minor pyrite concentrated at contacts.
123.53123 .55 Aplite, dark quartz has garnet and minor pyrite concentrated at contacts.
124.50125 .00 Euhedral garnet, 0.1 to 0.2 cm diameter composes 10 to 15t of rock.
125.03125 .08 quartz vein, massive, thite, contacts parallel to schistosity at 65 degrees to core axis.

| 80691 | 114.52 | 114.97 | .45 | 15 | $1.32 *$ | 270 | $3.76 *$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 80692 | 114.97 | 115.78 | .81 | 97 | 15 | $1.71 *$ | 138 | $2.92 \%$ |
| 80693 | 115.78 | 116.49 | .71 | 20 | $5.16 *$ | 122 | $3.54 *$ |  |
| 80694 | 117.93 | 119.44 | 1.51 | 5 | 31.0 | 36 | 4900 |  |

$80696125.25 \quad 126.35 \quad 1.10 \quad<5 \quad 11.0 \quad 27 \quad 500$

| Sample | From | To | Inty | Au | Ag | Cu | Zn |
| :---: | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
| No. | $(m)$ | (m) | (m) | ppb | ppm | ppa | ppm |

28130.92 QUARTZ-FELDSPAR PLUS OR MINUS SERICITE, SILLIMANITE, MUSCOVITE, GARNET SCHIST (UNIT 6)
Grey to light grey, well foliated schist: 40 to 50t quartz. 5 to 10\% biotito, 10 to 15\% muscovite. 10 to 25\%
microcryatalline feldspar, 2 to 5\% garnet, 5 to $10 \%$ magnetite, 2 to 5\% disseminated pyrite.
125.62125 .65 Pegmatite, 3 cm wide, sharp upper and
lower contacts. No apparent sulphides.
126.95127 .05 Quartz vein, 1 cm wide, biotite concentrated at contacts.
127.76127 .90 Quartz vein, 15 cm wide, 15 \% biotite-muscovitepyrite masses.
128.10128 .55 Broken core, possible lost core.
129.80129 .45 Quartz vein, 5 cm wide. sharp upper and lower contacts with no apparent sulphides.
130.62130 .65 Aplite, 3 cm wide, biotite concentrated at irregular upper and lower contacts.
92139.14 QUARTZ-EELDSPAR PLUS OR MINUS SERICITE, SILLIMANITE, MUSCOVITE, GARNET SCHIST (UMIT 6A)
Grey to light grey schist with poor schistosity at 65 degrees to core axis: 40 to 50 \% quartz, 2 to $10 \%$ biotite, 15 to 20t muscovite, 10 to 20\& microcrystalline feldspar.
5 to 8\% sillimanite, 1* garnet, 2 to 5* disseminated pyrite. trace magnetite and pyrrhotite. Sillimanita occurs as elongate masses parallel to schistosity.
130.92132 .91 Weak to poor schistosity. Garnet increasing to 2* down hole. minor magnetite.
132.91133 .00 Pegmatite. Irregular contacts.
133.50133 .75 Chlorite filled fracture up to 0.5 cm wide.
134.00134 .16 Pegmatite, irregular contacts.

10 to 15\% large orange red feldspar crystals.
134.60134 .64 Quartz vein, massive, white, irregular contacts. No apparent sulphides.
134.75134 .85 Pegmatite, 30 to 35 t orange red feldspar. Biotite concentrated at contacts.
135.13135 .15 Quartz vein, dark, fregular contacts surrounding a lens of biotite muscovite and sulphides.
135.75135 .90 Pegmatite, granitic, 3 to 5t hornblende. Sillimanite concentrated at contacts.
137.25137 .60 Noticable increase in garnet: 10 to 20 t
increasing down hole
137.60138 .00 Silicified zone with up to $70 \%$ quartz and $15 *$ garnet.
138.00139 .43 Garnet, 20 to 25t.


$$
F / 135 E 13-6
$$

HILL CITY GOLD INC.
HOLE NUMBER GL-88-04

- To (国)
79166.28 BIOTITE-FELDSPAR-QUARTZ SCHIST (UNIT 11

Box 26 (148.79 to 154.69 and box 28 (160.57 to 166.28) were dropped by drilling crew and intermixed. Accurate reconstruction of broken and ground core is impossible.
Distances between these intervals are of questionable accuracy.
149.00149 .09 Felsic granitoid. No apparent sulphides
150.60151 .53 Sillimanite lenses increased.
154.69155 .05 Increased biotite banding and better schistosity.
156.18151 .13 Silicified zone with 5 to 15 \% garnet in euhedral masses. Hith schistosity throughout.
161.50166 .28 Unaltered biotite-feldspar-quartz schist.

48 187.29 BIOTITE-FELDSPAR-QUARTZ SCHIST (UNIT 1)
Microcrystalline, grey to dark grey weakly foliated schist with generally homogeneous mineralogy: 40 to 50\% quartz, 30 to 50* biotite, 10 to 20* microcrystalifne feldspar, 5 to 10* muscovite, minor sphalerite, trace sulphides. Dominant schistosity at 60 degrees to core axis. Entire section is virtually barren of aulphide minerailzation.
166.68166 .90 Euhedral garnet, 1\%.
166.90 166.95 Quartz-carbonate veln, vuggy, minor alteration at upper and lower contacts. No apparent sulphides.
167.67167.71 Quartz vein, fractured, 2 to 5 b biotite inclusions. No apparent sulphides.
168.68168 .71 Quartz vein with carbonate vein at upper contact. Appears to disrupt schistosity locally. No apparent sulphides.
169.18169 .48 Aplite, 30 to $40 \%$ muscovite, 20 to 30\% quartz, 20. to 30\% feldspar. Sharp upper and lower contacts parallel to schistosity. Minor associated sulphides at lower contact.
171.30 173.10 Chloritized zone with 1\% garnet
174.00 175.00 Alternating bands, 5 to 10 cm hide of garnet rich and silica rich rock. Trace to 1\% disseminated sulphides throughout.
179.78 180.90 Chloritized zone with numerous fractures sub-parallel to core axis. Carbonate infills all fractures unconditionally.
186.72187 .25 Pegmatite, 20 to $40 \%$ quartz, 30 to 50\% feldspar, 10 to 20\% biotite, 5 to 10t muscovite, 1t garnet, 1t hornblende.
9188.25 QUARTZ-FELDSPAR PLUS OR MINUS SERICITE, SILLIHAIITE, MUSCOVITE, GARNET SCHIST (UNIT 6A)
Gradational contact between biotite-feldspar-quartz schist
(UNIT 11 and quartz-feldspar plus or minus sericite.
sillimanite, muscovite, garnet schist (UNIT GA). Muscovite
and garnet are incressing, biotite is decreasing.

|  | HOLE | NUMBER | GL-88-04 |  |  | PAGE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sample No. | From (m) | To <br> (m) | Intv (m) | Au <br> ppb | $\boldsymbol{\lambda g}$ ppm | $\begin{aligned} & \mathrm{Cu} \\ & \mathrm{ppm} \end{aligned}$ | $\begin{aligned} & \mathrm{Zn} \\ & \mathrm{ppm} \end{aligned}$ |
| 80807 | 150.73 | 151.58 | . 85 | 5 | 1.0 | 30 | 130 |
| 80808 | 158.20 | 159.03 | . 83 | < 5 | . 1 | 9 | 510 |
| 80809 | 159.03 | 160.58 | 1.55 | 5 | . 1 | 11 | 530 |

$80810 \quad 169.24 \quad 169.55 \quad .31 \quad 5 \quad .5 \quad 12 \quad 650$


MILL CITY GOLD INC.

described in the "Report on the Game Lake Property: 1997 Exploration Program by Brenda MacMurray and Michael Thompson for Tri Origin Exploration Limited, dated November 27, 1997, pages 8, 9, 10 and 11." (Note: A major of the rock unit descriptions are within the confines of the property. The remainder just outside the area of interest on examining the excerpts from this report.)

- Figure "A"-

Tri Origin Recommendations and Conclusions: Refer to the above reference report pages 14,15, and 16 .

- Figure "B"-


## Discussion:

RECEIVED
JAN 052004
GEOSCIENCE ASSESSMENT OFFICE

The author over the course of the last several years - Fall of 2001; Spring to Fall of 2002 , and Spring and Summer of 2003 - has made geological / prospecting excursions; particularly, within the eastern end of the claim group.

As a result of this activity, supported by the previous companies assessment work files and recommendations, that a constructive exploration modeling was required to further redefine target areas of merit. To meet this requirement, the following parties are involved in the project:

Mr. Alan Raoul and Mr. Craig Ravnaas,. District Geologists, Kenora Mining Division, Ontario and the services of ZONE 14, Winnipeg, Manitoba.

ZONE 14 are providing GIS (information sheet attached) and MapInfo support. The author has and is providing the mentioned hard copies of the pervious filed assessment reports, maps et cetera in conjunction with field GPS co-ordinates. The end result is compilation of all the exploration data in 2 and 3 dimensional map format which enhances targets.

The other approach is the reassessment of the geology and mineralization by re-sampling of the drill core both left and located in the field and in core storage at the Kenora Core Library. Three analytical methods are being used: 1/. Geochemical Analysis - multi-element, 2/. Whole rock - rock unit definition and
3/. Elements from the above to define decreasing / increasing mineralization. In other words, Na and Ca depletion $<1 \%, \mathrm{~K}>4 \%, \mathrm{Mg}>2 \%, \mathrm{Ba}>$ $2,000 \mathrm{ppm}$ and $\mathrm{Mn}>2,000 \mathrm{ppm}$. Input, thoughts and options provided and supported.by the staff of Kenora District Resident Geologist Office.

Portions of drill hole No. GL-88-04 - ( drill log attached) stored at the Kenora Core Library have been sampled and submitted to SGS Minerals Services, Toronto, Ontario for analysis. The two packages are ICP80 - geochemical analysis- and XRF102 - whole rock (attached). Additional drill hole sampling is continuing.

The purpose of this ongoing exploration program is the continuation of Tri Origin's target recommendations and the introduction of others by the reassessment of existing drill core and exploration data - geology, geophysics and rock chemistry - to locate deposits of $\mathrm{Au}, \mathrm{Ag}, \mathrm{Cu}, \mathrm{Zn}$ and rare-metals, Ta, Cs and Beryl. The method is the use of GIS profiling technology.


# Rock Unit Descriptions: <br> Unit 1 - Biotite-Feldspar-Quartz Schist <br> 6- Quartz-Feldspar +/- Sericite, Sillimanite, Muscovite, Garnet Schist <br> 6A- Alterated Quartz-Feldspar +/-Sericite, Sillimanite, Muscovite, Garnet Schist with visible sphalerite, pyrite and pyrrhotite 

- Figure "C"-

Report by: Alasdair J.M. Mowat C.E.T.
Report dated: August $18^{\text {th }}, 2003$
Report dated at: Kenora, Ontario

## FIGURES

Figure "A" : Geology
"B": Tri-Origin Recommendations and Conclusions
"C": Data Sheet for Diamond Drill Hole \# GL-88-04

## FIGURE "A"

## Geology

## Geology:

The geology of the Bridges / Fairservice property, also know as the Game Lake area is best described in the "Report on the Game Lake Property: 1997 Exploration Program by Brenda MacMurray and Michael Thompson for Tri Origin Exploration Limited, dated November 27, 1997, pages 8,9, 10 and 11." (Note: A major of the rock unit descriptions are within the confines of the property. The remainder just outside the area of interest on examining the excerpts from this report.)

## "Report on the Game Lake Property: 1997 Exploration Program

by<br>Brenda MacMurray and Michael Thompson<br>for<br>Tri Origin Exloration Limited dated November 27, 1997

* Rocks of the Game Lake area are part of the Archean-aged Wabigoon tectonic assemblage within the Superior Province. The property ercompasses malic to felsic metavolcanics and metasediments of the Vermilion Bay Greenstone Belt. This zone is bounded by the metasedimentary English Subprovince to the north and by the Dryberry Batholith to the south. Geology of the Game Lake area consists of several east- to northeast-striking, steeply north-dipping and south-facing rock units. The major units (Figure 3, back pocket) include mafic to felsic (mostly intermediate) metavolcanics in the north and southwest parts of the property which grade into reworked metavolcanics and metasediments in the central and eastern parts of the area. Iron formation outcrops (both siliceous oxide and sulphide types) are found scattered throughout the property. Granitic pegmatite and granite dykes and sills cut most rock units in the area and are thought to be a volatile-rich phase of the Dryberry Batholith. Rocks in this area have reached Upper Amphibolite Facies metamorphism.

The seven major rock units on the Game Lake Property (Figure 3) include the following, in order of abundance (most to least):

Metasediments - These are commonly biotite- or homblende-rich, occasionally muscovite-bearing or rarely garnetiferous wackes and rarely calc-silicate, quartzite and sandstone. The calc-silicate is diopside-rich and green to black in colour. Metasediments are usually light to dark grey, sometimes greenish (particularly the calc-silicate), fine to medium grained, occasionally gneissic and usually foliated. Foliation is easily seen by the alignment of micas or hormblende. Rocks that were mapped as arkosic or quartzose wackes, quartzites and sandstones could be related to felsic metavolcanics (reworked?).
Intermediate Pyroclastic - This unit is a light to medium grey, ash, lapilli, crystal or most frequently bomb/block tuff with up to $15-20 \%$ matic minerals including biotite, homblende and occasionally magnetite. The bombs and blocks are coarser (fine to medium) grained than the ash matrix, granodioritic in composition and frequently stretched parallel to foliation. They most often have soft edges and therefore are bombs but occasionally have the more distinct or sharper edges of blocks. The intermediate pyroclastic rock is occasionally to rarely gneissic in appearance but this is most likely caused by very stretched fragments. Occasionally, the rock appears more sedimentary in nature. At intervals, alteration includes silicification and rarely potassic or chlorite alteration.
Felsic Metavolcanics - This unit consists of greyish-white to light grey, frequently silicified ash, lapilli, bomb/block and rarely quariz crystal tuffs. There is occasional potassic or sericite alteration found as well. There are minor matic minerals present, up to $5-10 \%$, and these include biotite, homblende and rarely magnetite. The felsic metavolcanics are commonly schistose or stretched with muscovite or sericite marking the foliation, particularly in the area around Harrison Lake (Main Zone Target Area). This unit frequently appears reworked, especially in the northeast part of the property.
Granitic Pegmatite/Granite - These rocks are coarse grained and pink or rarely to occasionally white. They intrude as sills, dykes or occasionally lenses and in some cases were seen to cut across foliation. Sill and dykes are frequently either folded or boudinaged.
Iron Formation - This unit is mostly siliceous oxide iron formation with up to $70 \%$ magnetite found in outcrop. Occasionally pyrite- and pyrrhotite-rich sulphide iron formation is found. Always magnetic, these rocks are often punky and rusty with occasional hematite staining. Brecciated iron formation was also seen west of Leigh Lake with rusty fragments in a siliceous matrix. It is uncertain whether any of these units are truly iron formation. Localized and concentrated sulphide and oxide mineralization over centimeters to meters within metavolcanics and metasediments may be a more accurate description of this occurrence. Another related unit is often closely associated with iron formation on the property. This "lean iron formation" unit is a gannetiferous amphibolite and is frequently chlorite-bearing and occasionally magnetite-bearing as well.

Gabbro - This rock is medium to dark grey-green or light grey with dark green to black clots of pyroxene (augite). It is medium (to coarse) grained and occasionally amphibolitic in composition. Mafic Metavolcanics - This unit is medium to dark grey-green, fine grained and is frequently chloritic.

The three most abundant units on the Game Lake Property, intermediate pyroclastics, metasediments and felsic metavolcanics, are very likely related. The intermediate and felsic metavolcanics are probably proximal and distal (respectively) rocks of the same sequence. The metasediments could be reworked metavolcanics. Conversely, the felsic metavolcanics might be bleached and silicified metasediments. Because of the degree of metamorphism in the area and the alteration, it was difficult to determine the protoliths of the rocks. There was an outcrop in the northeast that appeared to be almost syenitic in composition. However, upon closer inspection, it was decided that it was a metavolcanic that had undergone very strong potassic alteration.

Alteration on the Game Lake Property, particularly silicitication and sericitization, appears to be concentrated in the Main Zone (Target \#6, described below) and the Octopus Lake NW Area (described below). Elsewhere on the property, silicification is quite common and occurs mostly in the metavolcanics, potassic alteration and sericitization occur occasionally and chlorite and epidote alteration are rare. Potassic alteration is slightly more common in the northeast (Targets \#1 and 2 and the Northem Zone, both described below). Alteration is noted most often in the felsic metavolcanics which could indicate that these rocks are altered versions of the metasediments.

While mapping, the strike of bedding was difficult to detect due to extensive stretching of the rock units and the high grade of metamorphism. The overall strike of foliation is approximately $225-270^{\circ}$ and dip is approximately $50-70^{\circ}$ northward. In the northeast part of the property, foliation was found to strike approximately $250-270^{\circ}$ and dip $50-60^{\circ}$. In the southeast, the strike of foliation had a greater range, from 220-280 , averaging around $240^{\circ}$. Dips in the southeast ranged as well, from $50^{\circ}$-vertical. South of Harrison Lake, dips are steeper at $75^{\circ}$-vertical. In the north-central part of the property, around Leigh Lake, foliation ranges quite widely, from 220-310 and dips are northward 40-65 ${ }^{\circ}$ where measurable. However, magnetic iron formation was found throughout this area so these measurements may not be accurate. The south-central area foliation strikes $215-230^{\circ}$, slightly more southwesterly than the property average, and dips $50-80^{\circ}$. The southwest area displays strike of foliation at $215-280^{\circ}$ and dipping $35-60^{\circ}$. In the northwest, on Gordon Lake Road, particularly near the highway, the foliation direction is erratic, varying widely over a short distance. Around the northern part of Octopus Lake, the foliation appears to swing approximately
east-west (to ENE-WSW). Pryslak (1976, ODM-GR130) hypothesized about a conical fold, plunging southwest and centered around Octopus Lake. This theory may explain the change in foliation in this area. Plunges of clasts within the intermediate pyroclastic were found to be 30-60 along the Highway 17 in the central part of the property and approximately $45^{\circ}$ off of Experimental Lake Road in the southwest.

Generally, directions of foliation vary more in the southern part of the Game Lake Property, closer to the Dryberry Batholith. Differences in strike of foliation between the geophysically interpreted domains (Figure 3) is very subtle. Foliations may be slightly closer to southwest ( $-225^{\circ}$ ) in the west than the foliations in the eastern domains which strike WSW.

## FIGURE "B"

Results of the 1997 Game Lake exploration program show that the property has great potential. It is recommended that five target areas be considered for future work (Figure 5). These targets were selected based on a number of factors including geology, geophysical anomalies (airbome and ground), significant assays (from ddh and surface samples) and untested previous drill targets.

Northern Zone Target Area (UTM: $450550 \mathrm{mE}, 5521550 \mathrm{mN} ; 452210 \mathrm{mE}, 5522100 \mathrm{mN}$; $450670 \mathrm{mE}, 5521200 \mathrm{mN}$; $452330 \mathrm{mE}, 5521750 \mathrm{mN}$ ): Due to favourable geology, previous drilling that did not effectively test the IP and surface assay anomalies, and anomalous Au and Ag in drill core, this area warrants further investigation. Stripping and trenching are recommended around surface assay anomalies (in particular, Rio Algom's 2500 ppb Au surface showing, which must be located first) and around the untested IP anomalies. Three drill holes are also recommended to test Au anomalies at depth and to cover the untested IP. In order of priority, these are:

$$
\begin{array}{ll}
\text { A (to test IP and Au) } & \text { L32 }+00 \mathrm{E}, 2+00 \mathrm{~N}, \text { UTM: } 451450 \mathrm{mE}, 5521660 \mathrm{mN} \text {, azimuth: } 160^{\circ} \text {, dip: } \\
& 60^{\circ}, \text { length: } 250 \mathrm{~m} \\
\text { B (to test } \mathrm{IP} \text { ) } \quad & \text { L29 }+00 \mathrm{E}, 3+00 \mathrm{~N}, \text { UTM: } 451120 \mathrm{mE}, 5521660 \mathrm{mN} \text {, azimuth: } 160^{\circ} \text {, dip: } \\
& 60^{\circ}, \text { length: } 200 \mathrm{~m} \\
\text { C (to test } \mathrm{Au}) \quad & \text { L36+50E, } 2+00 \mathrm{~N}, \text { UTM: } 451890 \mathrm{mE}, 5521800 \mathrm{mN} \text {, azimuth: } 160^{\circ}, \text { dip: } \\
& 60^{\circ}, \text { length: } 250 \mathrm{~m}
\end{array}
$$

Main Zone Target Area (Target \#6, UTM: 445 000-450400mE, 5520500 mN ; 451 $190 \mathrm{mE}, 5520500 \mathrm{mN}$ and $450000-450400 \mathrm{mE}, 5521000 \mathrm{mN}$; $451035 \mathrm{mE}, 5521205 \mathrm{mN}$ ):

Favourable geology, an airborne magnetic high, multiple AEM conductors and anomalous $\mathrm{Au}, \mathrm{Ag}, \mathrm{Cu}$ and Zn in previous drilling are the criteria to show that this area warrants further investigation. Sufficient space to permit the inclusion of the minimum size criteria for an ore body was left between previous drill holes with anomalous assays. Therefore, further drilling is recommended to test IP, surface and ddh Au . In order of priority, the following drill holes are recommended:

A
L20 + OOE, $1+$ OOS, UTM: $450425 \mathrm{mE}, 5520950 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 200 m
B L18 + 00E, $0+50$, UTM: $450210 \mathrm{mE}, 5520940 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 200 m
C L26+50E, $0+25 \mathrm{~S}$, UTM: $451020 \mathrm{mE}, 5521230 \mathrm{mN}$, azimuth: $160^{\circ}$, dip: $60^{\circ}$, length: 250 m

Rio BL Drill Road Target Area (UTM: $448270 \mathrm{mE}, 5520120 \mathrm{mN} ; 449600 \mathrm{mE}, 5520$ 760 mN ; $449410 \mathrm{mE}, 5521120 \mathrm{mN}$; $448070 \mathrm{mE}, 5520470 \mathrm{mN}$ ): This zone is located west of the Main Zone on the Rio Algom drill road that originates where the baseline of the grid meets Hwy. 17 (just west of Stewart Lake Lodge). This area includes several diamond drill holes with anomalous assays ( $2.06 \mathrm{~g} / \mathrm{t} \mathrm{Au}, 18 \mathrm{~g} / \mathrm{t} \mathrm{Ag}, 0.71 \% \mathrm{Zn}$ ) from Rio Algom's 1986 program and anomalous grab samples ( $504 \mathrm{ppb} \mathrm{Au} ; 64.7 \mathrm{ppm} \mathrm{Ag} ; 100 \mathrm{ppm} \mathrm{Co} ; 4040 \mathrm{ppm} \mathrm{Pb} ; 7320 \mathrm{ppm} \mathrm{Zn}$ ) from Tri Origin's 1997 exploration program. A more detailed look at the geology of this area and resampling the 1986 Rio drill core (if it can be located) is recommended.

Blue Sky Target Area (UTM: $450000 \mathrm{mE}, 5521250 \mathrm{mN} ; 450450 \mathrm{mE}, 5521650 \mathrm{mN}$ ): A high airborne magnetic signature which indicated the possible presence of a fold nose and a moderate to strong AEM anomaly was the reason for the interest in this target area. The strong IP anomaly that runs through the Northern Zone may pass right through the centre of this area but the survey ends here. There is another more diffuse IP trend that passes through the southern part of this target area. No previous work has been recorded for this zone. Detailed mapping and assay sampling is recommended.

Southern Zone Target Area (UTM: $450290 \mathrm{mE}, 5520380 \mathrm{mN} ; 452350 \mathrm{mE}, 5521120 \mathrm{mN}$; $452270 \mathrm{mE}, 5521360 \mathrm{mN} ; 450200 \mathrm{mE}, 5520610 \mathrm{mN}$ ): This zone is located south of the Main Zone at and near the contact of the metasediments and felsic metavolcanics with the Dryberry Batholith. This zone has likely experienced the effects of contact metamorphism with the Dryberry Batholith. The area has not been effectively investigated by Rio Algom, Mill City or Noranda. Mill City's drill holes GL88-03 and GL88-08 were too short to adequately test the mineralization and IP anomalies found in this area. Mill City recommended that GL88-03 and -08 be deepened to test this target. Detailed mapping and assaying of this area is recommended. Extending the IP survey to cover this zone would also be useful to check the extent and strength of the IP targers.

There are similarities between the Game Lake Property and the Manitouwadge camp massive sulphide deposits (Geco, for example) including rock units and grade of metamorphism (upper Amphibolite Facies). Within the Manitouwadge Synform, intermediate to mafic metavolcanics are overlain by felsic metavolcanics and iron formation, which is in turn overlain by metasediments. A porphyritic granitoid body is found at the center of the synform. Many of the felsic to intermediate metavolcanic rocks have been altered to sillimanite-muscovite-quartz schist (also referred to as sericite schist). Economic to subeconomic mineralization is located within
deformed metavolcanics or iron formations (Zaleski and Peterson, 1995).
Anomalous assay results, mineralized felsic metavolcanics and a general similarity to the Manitouwadge camp contribute to make the Game Lake Property an attractive location for future exploration. Future work on the Game Lake Property should also include petrography, whole rock and rare earth element (REE) analysis of selected samples and possibly age dating of the rock units. This work would be invaluable to help sort out the sequence of deformation in the area, possible protoliths and relationships between the different units."

# FIGURE "C" 

## DATA SHEET

for
Diamond Drill Hole \# GL-88-04
GPS drill hole co-ordinates (NAD 27) Zone $15-5521415.39 \mathrm{~N}$ by 451896.67 E
(NAD 83-5521629.22 N by 451896.67 E )
Claim No. K1221212
NOTE: - Core stored at the MNDM Kenora Core Library, Ontario

- Method of core/rock splitting by diamond saw wet cutting
- Assistance provided by Mr. Alan Raoul, Kenora District Geologist

| Assay/Sample$\#$ | Metres |  | Box |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | From | To | Length | \# | Description |
| EF-GL-88-04 |  |  |  |  |  |
| -01 | 43.61 | - 44.52 | 0.91 | 8 | - Rock Unit 1 |
| -02 | 70.33 | - 71.10 | 0.77 | 12 | " |
| -03 | 78.84 | - 79.75 | 0.91 | 14 | - " |
| -04 | 85.60 | - 89.90 | 0.30 | 15 | - " |
| -05 | 92.00 | - 92.30 | 0.30 | 16 | - " |
| -06 | 97.43 | - 97.78 | 0.35 | 17 | - Rock Unit 6A |
| -07 | 97.78 | - 98.66 | 0.88 | 17 | " |
| -08 | 98.66 | - 100.53 | 1.87 | 17 | - " |
| -09 | 100.53 | - 101.60 | 1.07 | 17 | - " |
| -10 | 101.60 | - 102.21 | 0.61 | $17 \& 18$ | - |
| -11 | 102.21 | - 102.87 | 0.66 | 18 | - " |
| -12 | 102.87 | - 103.70 | 0.83 | 18 | - " |
| -13 | 104.27 | - 104.79 | 0.52 | 18 | " |
| -14 | 104.79 | - 105.50 | 0.71 | 18 | - " |
| -15 | 105.50 | - 106.21 | 0.71 | 18 | - " |
| -16 | 106.21 | - 106.51 | 0.30 | 18 | - " |
| -17 | 106.51 | - 107.35 | 0.84 | 18 | " |
| -18 | 107.35 | - 108.00 | 0.65 | 19 | - Rock Unit 6 |
| -19 | 108.00 | - 109.00 | 1.00 | 19 | " |
| -20 | 114.17 | - 114.52 | 0.35 | 20 | " |
| -21 | 114.52 | - 116.49 | 1.97 | 20 | - Rock Unit 6A |
| -22 | 116.80 | - 117.93 | 1.13 | 20 | " |
| -23 | 117.93 | - 119.44 | 1.51 | 20 | - " |
| -24 | 119.44 | - 120.00 | 0.56 | 21 | " |
| -25 | 120.00 | - 120.88 | 0.88 | 21 | - " |
| -26 | 120.88 | - 121.18 | 0.30 | 21 | " |
| -27 | 157.90 | - 158.25 | 0.35 | 27 | - Rock Unit 1 |
| -28 | 161.80 | - 162.20 | 0.40 | 28 | ، |
| -29 | 171.60 | - 171.90 | 0.30 | 29 | - " |

## PLANS \& DIAGRAMS

1/. Bridges Twp. G. 0812 Claim Map
2/. Bridges Twp. Claim Positions \& Numbers
3/. Bridges Twp. Plan of Drill Hole Sections
4/. Preliminary Geology Map - West Half, Sheet 1 of 2, scale 1:5,000
5/. Preliminary Geology Map - East Half, Sheet 2 of 2, scale 1:5,000
6/. Analytical Work Performed by SGS -Assay Data for D.D. H. \# GI-88-04
71. Diamond Drill Hole X-Section Diagrams for Au (ppb) Histogram

8/. Diamond Drill Hole X-Section Diagrams for Cu (ppm) Histogram,
9/. Diamond Drill Hole X-Section Diagrams for D.D.H. \# Gl-88-04

## Emerald Fields Resource Corporation BRIDGES TOWNSHIP PROPERTY

Claim Positions and Numbers


## Emerald Fields Resource Corporation BRIDGES TOWNSHIP PROPERTY <br> Plan of Drill Hole Sections



# ANALYTICAL WORK PERFORMED 

by<br>SGS<br>1885 Leslie Street<br>Don Mills, Ontario M3B 2M3<br>Tel: (416) 445-5755<br>Fax: (416) 445-4152<br>Work Order: 073980

| Qnty | Code | Description |
| :--- | :--- | :--- |
| 29 | XRF102 | Whole rock analysis (majors + traces) |
| 29 | ICP80 | ICP, Multi-acid Digestion |

Computer printout attached. Original file in floppy disc format.

| Sample Idt SiO 2 <br> Scheme CI XRF102 |  | Al2O3 | CaO | MgO | Na 2 O | K2O | Fe 2 O 3 | MnO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 |
| Analysis U \% |  | \% | \% | \% | \% | \% | \% | \% |
| Detection L | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| EF-GL-88- ${ }^{\text {i }}$ | 64.9 | 16.08 | 5.97 | 1.38 | 0.88 | 3.47 | 5.17 | 0.3 |
| EF-GL-88-2 | 64.56 | 15.66 | 5.08 | 1.81 | 2.77 | 2.78 | 4.46 | 0.12 |
| EF-GL-88-3 | 62.16 | 15.67 | 4.53 | 2.3 | 2.01 | 4.6 | 5.55 | 0.22 |
| EF-GL-88-+ | 65.59 | 15.51 | 3.39 | 1.67 | 2.56 | 3.67 | 4.76 | 0.21 |
| EF-GL-88- ${ }^{\text {- }}$ | 63.23 | 15.95 | 5.13 | 2.65 | 0.21 | 4.66 | 4.84 | 0.25 |
| EF-GL-88-¢ | 56.52 | 18.18 | 1.58 | 1.02 | 0.44 | 10.21 | 5.79 | 1.64 |
| EF-GL-88-7 | 56.65 | 18.12 | 2.44 | 1.07 | 0.68 | 8.74 | 4.78 | 3.25 |
| EF-GL-88- $\boldsymbol{\varepsilon}$ | 60.22 | 16.61 | 1.69 | 0.86 | 0.26 | 6.56 | 4.33 | 2.31 |
| EF-GL-88- | 60.65 | 15.59 | 0.69 | 0.73 | <0.01 | 6.48 | 3.89 | 3.04 |
| EF-GL-88-心 | 65.88 | 14.12 | 0.54 | 0.53 | <0.01 | 6.28 | 2.64 | 3.05 |
| EF-GL-88-11 | 59.56 | 15.72 | 0.78 | 1.14 | <0.01 | 6.36 | 3.78 | 2.71 |
| EF-GL-88-12 | 56.97 | 15.47 | 0.84 | 1.09 | <0.01 | 5.95 | 4.2 | 4.4 |
| EF-GL-88-13 | 57.2 | 13.08 | 0.69 | 0.8 | <0.01 | 5.52 | 6.04 | 3.6 |
| EF-GL-88-i4 | 63.39 | 14.46 | 1.06 | 0.94 | $<0.01$ | 5.72 | 3.9 | 2.87 |
| EF-GL-88-is | 64.65 | 16.7 | 2.06 | 1 | $<0.01$ | 2.58 | 3.97 | 2.29 |
| EF-GL-88- | 65.61 | 15.46 | 1.86 | 1.69 | 0.31 | 5.14 | 4.54 | 1.23 |
| EF-GL-88-17 | 66.18 | 15.37 | 2.3 | 1.58 | 0.32 | 5.4 | 4.58 | 1 |
| EF-GL-88-it | 65.59 | 15.86 | 3.39 | 1.88 | 0.37 | 5.23 | 4.44 | 0.71 |
| EF-GL-88- ${ }^{\text {\% }}$ | 66.33 | 14.85 | 2.54 | 1.69 | 0.27 | 5.13 | 4.93 | 0.95 |
| EF-GL-88- LC | 62.49 | 14.73 | 0.66 | 1.83 | <0.01 | 5.78 | 7.29 | 0.82 |
| EF-GL-88-21 | 55.88 | 12.95 | 0.39 | 1.06 | <0.01 | 4.7 | 9.86 | 0.82 |
| EF-GL-88-22. | 59.46 | 14.35 | 0.63 | 2.29 | <0.01 | 5.58 | 10.57 | 1.59 |
| EF-GL-88-23 | 57.19 | 14.28 | 1.01 | 2.42 | <0.01 | 5.38 | 10.42 | 1.58 |
| EF-GL-88-24 | 60.8 | 14.4 | 0.49 | 1.15 | $<0.01$ | 4.26 | 10.63 | 1.66 |
| EF-GL-88-25 | 60.63 | 14.2 | 0.79 | 1.59 | <0.01 | 5.04 | 9.54 | 2.35 |
| EF-GL-88-26 | 59.11 | 14.86 | 0.61 | 1.54 | $<0.01$ | 6.18 | 11.53 | 2.14 |
| EF-GL-88-27 | 59.9 | 16.25 | 2.58 | 1.11 | 0.56 | 5.38 | 2.85 | 6.02 |
| EF-GL-88-2\% | 62.77 | 15.6 | 6.11 | 3.15 | 1 | 4.26 | 4.54 | 0.98 |
| EF-GL-88-2 | 68.85 | 15.25 | 3.57 | 1.42 | 0.43 | 3.78 | 3.47 | 1.29 |
| DUP-EF-G | 65.04 | 16.07 | 5.96 | 1.38 | 0.88 | 3.47 | 5.17 | 0.3 |
| DUP-EF-G | 57.33 | 13.13 | 0.69 | 0.8 | $<0.01$ | 5.51 | 6.04 | 3.58 |
| DUP-EF-G | 60.63 | 14.21 | 0.79 | 1.59 | <0.01 | 5.06 | 9.55 | 2.35 |


| TiO2 <br> XRF102 | $\begin{aligned} & \text { P2O5 } \\ & \text { XRF102 } \end{aligned}$ | $\mathrm{Cr} 2 \mathrm{O} 3$ XRF102 | LOI | Sum | Rb | Sr | Y | $\mathrm{Zr}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\%$ | \% | \% | \% | $\%$ | ppm | XRF102 ppm | XRF102 ppm | XRF102 ppm |
| 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 2 | 2 | 2 | 2 |
| 0.5 | 0.15 | 0.02 | 1 | 99.96 | 92 | 364 | 8 | 84 |
| 0.49 | 0.13 | 0.03 | 0.9 | 98.96 | 76 | 493 | 11 | 107 |
| 0.5 | 0.14 | 0.02 | 1.65 | 99.54 | 119 | 479 | 10 | 90 |
| 0.43 | 0.13 | 0.04 | 1.35 | 99.49 | 88 | 348 | 7 | 89 |
| 0.5 | 0.14 | 0.02 | 2.1 | 99.82 | 116 | 147 | 11 | 91 |
| 0.65 | 0.21 | 0.03 | 1.8 | 98.35 | 247 | 163 | 12 | 123 |
| 0.55 | 0.19 | 0.02 | 1 | 97.73 | 202 | 151 | 13 | 109 |
| 0.5 | 0.15 | 0.04 | 2.2 | 95.88 | 182 | 115 | 12 | 105 |
| 0.46 | 0.12 | 0.04 | 2.8 | 94.53 | 183 | 88 | 8 | 105 |
| 0.28 | 0.09 | 0.05 | 2 | 95.55 | 183 | 79 | 10 | 75 |
| 0.45 | 0.11 | 0.04 | 3.1 | 93.7 | 204 | 78 | 11 | 114 |
| 0.44 | 0.11 | 0.05 | 3 | 92.64 | 191 | 80 | 10 | 112 |
| 0.35 | 0.12 | 0.04 | 2.8 | 89.69 | 174 | 77 | 9 | 100 |
| 0.3 | 0.1 | 0.05 | 2.2 | 95.18 | 173 | 107 | 9 | 83 |
| 0.38 | 0.1 | 0.04 | 2.4 | 96.11 | 88 | 96 | 11 | 81 |
| 0.45 | 0.11 | 0.04 | 1.95 | 98.52 | 196 | 95 | 11 | 107 |
| 0.43 | 0.11 | 0.03 | 1.65 | 99.04 | 177 | 102 | 11 | 97 |
| 0.43 | 0.11 | 0.04 | 1.6 | 99.77 | 172 | 131 | 8 | 100 |
| 0.45 | 0.11 | 0.03 | 1.65 | 99.05 | 152 | 132 | 9 | 100 |
| 0.41 | 0.11 | 0.04 | 3.5 | 97.73 | 156 | 94 | 6 | 107 |
| 0.4 | 0.08 | 0.04 | 5 | 89.98 | 110 | 75 | 5 | 101 |
| 0.4 | 0.11 | 0.05 | 1.75 | 96.64 | 138 | 85 | 6 | 98 |
| 0.4 | 0.12 | 0.04 | 1.6 | 94.09 | 136 | 87 | 7 | 97 |
| 0.41 | 0.11 | 0.05 | 3 | 96.58 | 88 | 47 | 7 | 97 |
| 0.37 | 0.14 | 0.04 | 1.2 | 95.71 | 110 | 48 | 9 | 89 |
| 0.41 | 0.11 | 0.05 | 1 | 97.63 | 133 | 47 | 8 | 98 |
| 0.41 | 0.12 | 0.04 | 0.4 | 95.74 | 120 | 78 | 12 | 95 |
| 0.44 | 0.12 | 0.05 | 0.4 | 99.55 | 120 | 212 | 11 | 89 |
| 0.34 | 0.11 | 0.02 | 0.7 | 99.32 | 87 | 92 | 7 | 85 |
| 0.5 | 0.15 | 0.02 | 1 | 100.1 | 91 | 366 | 8 | 84 |
| 0.35 | 0.12 | 0.04 | 2.9 | 89.93 | 173 | 79 | 7 | 100 |
| 0.37 | 0.14 | 0.04 | 1.2 | 95.75 | 110 | 48 | 9 | 90 |


| Nb XRF102 ppm | Ba <br> XRF102 <br> ppm | Be ICP80 ppm | Na ICP80 \% | Mg ICP80 \% | AI <br> ICP80 \% | $\begin{aligned} & \text { P } \\ & \text { ICP80 } \\ & \% \end{aligned}$ | ICP80 \% | Ca ICP80 \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 220 | 0.5 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| 6 | 6687 | <0.5 | 0.7 | 0.87 | 8.6 | 0.07 | 3.14 | 4.61 |
| 6 | 6877 | <0.5 | 2.08 | 1.08 | 8.2 | 0.06 | 2.49 | 3.68 |
| 6 | 61000 | $<0.5$ | 1.5 | 1.38 | 7.99 | 0.07 | 4.02 | 3.35 |
| 6 | 6981 | <0.5 | 1.93 | 1 | 7.94 | 0.06 | 3.21 | 2.46 |
| 5 | 5780 | <0.5 | 0.16 | 1.57 | 8.09 | 0.07 | 3.98 | 3.75 |
| 5 | 51830 | <0.5 | 0.37 | 0.63 | 9.54 | 0.1 | 9.22 | 1.25 |
| 6 | - 1780 | <0.5 | 0.46 | 0.6 | 8.73 | 0.08 | 7.25 | 1.73 |
| 7 | 7990 | $<0.5$ | 0.42 | 0.52 | 7.66 | 0.07 | 5.66 | 1.26 |
| 6 | 1240 | 0.5 | 0.34 | 0.42 | 6.84 | 0.06 | 5.35 | 0.49 |
| 7 | 1170 | $<0.5$ | 0.3 | 0.3 | 6.5 | 0.04 | 5.56 | 0.39 |
| 8 | 81490 | 1.1 | 0.33 | 0.66 | 7.33 | 0.05 | 5.32 | 0.58 |
| 8 | 1420 | $<0.5$ | 0.31 | 0.68 | 7.32 | 0.06 | 5.27 | 0.64 |
| 6 | 1690 | $<0.5$ | 0.25 | 0.46 | 5.97 | 0.06 | 4.67 | 0.49 |
| 7 | 1570 | 0.8 | 0.34 | 0.54 | 6.34 | 0.05 | 4.74 | 0.75 |
| 9 | 571 | 1 | 0.27 | 0.6 | 5.77 | 0.05 | 2.33 | 1.5 |
| 8 | 740 | $<0.5$ | 0.29 | 1.02 | 7.07 | 0.05 | 4.5 | 1.41 |
| 8 | 578 | 0.7 | 0.36 | 0.99 | 7.59 | 0.06 | 4.82 | 1.79 |
| 7 | 667 | $<0.5$ | 0.33 | 1.16 | 8.06 | 0.05 | 4.64 | 2.6 |
| 7 | 725 | $<0.5$ | 0.3 | 1.05 | 7.53 | 0.05 | 4.48 | 1.94 |
| 5 | 946 | <0.5 | 0.17 | 1.06 | 6.67 | 0.05 | 4.91 | 0.5 |
| 4 | 794 | 0.6 | 0.15 | 0.62 | 5.4 | 0.04 | 3.83 | 0.27 |
| 5 | 1000 | <0.5 | 0.16 | 1.36 | 6.31 | 0.05 | 5.05 | 0.48 |
| 6 | 1090 | $<0.5$ | 0.13 | 1.41 | 6.15 | 0.05 | 4.69 | 0.64 |
| 4 | 537 | <0.5 | 0.13 | 0.59 | 4.96 | 0.05 | 3.67 | 0.35 |
| 6 | 856 | $<0.5$ | 0.14 | 0.9 | 6.03 | 0.06 | 4.37 | 0.57 |
| 4 | 885 | <0.5 | 0.18 | 0.97 | 7.17 | 0.05 | 5.59 | 0.47 |
| 6 | 808 | <0.5 | 0.41 | 0.64 | 7.56 | 0.05 | 4.6 | 1.83 |
| 8 | 744 | $<0.5$ | 0.8 | 2.03 | 8.45 | 0.06 | 3.94 | 4.78 |
| 5 | 450 | <0.5 | 0.47 | 0.88 | 7.57 | 0.05 | 3.36 | 2.74 |
| 6 | 685 | $<0.5$ | 0.65 | 0.86 | 8.41 | 0.07 | 3.03 | 4.51 |
| 5 | 1690 | <0.5 | 0.24 | 0.47 | 6.05 | 0.06 | 4.75 | 0.49 |
| 6 | 858 | <0.5 | 0.14 | 0.92 | 6.11 | 0.07 | 4.42 | 0.58 |


| Sc ICP80 ppm | Ti ICP80 \% | V <br> ICP80 ppm | Cr ICP80 ppm | Mn ICP80 ppm | Fe ICP80 \% | Co <br> ICP80 <br> ppm | Ni <br> ICP80 <br> ppm | Cu ICP80 ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.5 | 0.01 | 2 | 1 | 2 | 0.01 | 1 | 1 | 0.5 |
| 10.1 | 0.32 | 97 | 102 | 2120 | 3.61 | 16 | 23 | 112 |
| 7.2 | 0.36 | 78 | 146 | 858 | 2.99 | 11 | 14 | 18.2 |
| 10.1 | 0.37 | 96 | 98 | 1620 | 3.75 | 17 | 27 | 22.7 |
| 6.3 | 0.3 | 69 | 140 | 1480 | 3.2 | 14 | 20 | 236 |
| 10 | 0.36 | 96 | 82 | 1730 | 3.29 | 13 | 24 | 27.5 |
| 11.8 | 0.49 | 116 | 140 | >10000 | 4.46 | 14 | 54 | 113 |
| 9.6 | 0.37 | 94 | 107 | $>10000$ | 4 | 12 | 43 | 59.4 |
| 9.7 | 0.21 | 72 | 168 | >10000 | 3.6 | 12 | 39 | 146 |
| 7.4 | 0.07 | 61 | 197 | >10000 | 3.47 | 12 | 50 | 224 |
| 6.2 | 0.06 | 43 | 185 | >10000 | 2.8 | 7 | 33 | 186 |
| 8.2 | 0.1 | 60 | 151 | >10000 | 3.45 | 10 | 46 | 225 |
| 9.6 | 0.12 | 72 | 265 | >10000 | 4.32 | 12 | 62 | 135 |
| 6.5 | 0.12 | 50 | 231 | >10000 | 5.14 | 11 | 60 | 309 |
| 5.3 | 0.08 | 39 | 183 | >10000 | 3.45 | 8 | 38 | 87.8 |
| 7.8 | 0.12 | 56 | 178 | >10000 | 3.34 | 10 | 32 | 90.1 |
| 6.2 | 0.21 | 62 | 176 | 8660 | 3.46 | 13 | 19 | 141 |
| 6 | 0.22 | 59 | 126 | 7400 | 3.5 | 12 | 19 | 188 |
| 5.4 | 0.29 | 64 | 172 | 5020 | 3.23 | 11 | 17 | 173 |
| 5.8 | 0.21 | 64 | 123 | 6920 | 3.66 | 13 | 20 | 231 |
| 6.6 | 0.26 | 65 | 210 | 5720 | 4.9 | 11 | 42 | 118 |
| 6 | 0.2 | 54 | 140 | 5540 | 6.48 | 17 | 53 | 168 |
| 7 | 0.28 | 58 | 227 | >10000 | 6.93 | 11 | 57 | 75 |
| 7.3 | 0.27 | 63 | 190 | $>10000$ | 6.69 | 10 | 57 | 31.3 |
| 7.6 | 0.2 | 50 | 236 | >10000 | 6.43 | 16 | 62 | 106 |
| 7.7 | 0.26 | 58 | 197 | >10000 | 6.41 | 10 | 60 | 48.6 |
| 7.5 | 0.31 | 70 | 270 | $>10000$ | 7.69 |  | 62 | 48.7 |
| 8.5 | 0.19 | 69 | 198 | >10000 | 3.53 | 12 | 75 | 10.8 |
| 10 | 0.33 | 87 | 221 | 7230 | 3.45 | 17 | 97 | 11.3 |
| 4.2 | 0.15 | 42 | 95 | 9210 | 2.75 | 7 | 13 | 34.9 |
| 9.9 | 0.32 | 95 | 98 | 2110 | 3.53 | 16 | 22 | 110 |
| 6.6 | 0.12 | 51 | 258 | >10000 | 5.13 | 11 | 60 | 307 |
| 7.7 | 0.26 | 59 | 198 | >10000 | 6.46 | 10 | 60 | 50.2 |



| Sb <br> ICP80 <br> ppm |  | Ba ICP80 ppm | La ICP80 ppm | W ICP80 ppm |  | Pb ICP80 ppm | Bi <br> ICP80 ppm |  | Li ICP80 ppm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5 | 1 | 0.5 |  | 10 | 2 |  | 5 | , |
| $<5$ |  | 704 | 26.9 | $<10$ |  | 313 |  | 6 | 26 |
| <5 |  | 862 | 18.1 | $<10$ |  | 36 |  | 5 | 57 |
| $<5$ |  | 1000 | 22.2 |  | 10 | 15 |  | 6 | 50 |
| <5 |  | 1040 | 19.7 | $<10$ |  | 74 | $<5$ |  | 34 |
| < 5 |  | 756 | 23.5 | <10 |  | 17 | <5 |  | 85 |
| <5 |  | 1960 | 29.4 |  | 14 | 744 |  | 10 | 27 |
| $<5$ |  | 1730 | 26.2 |  | 14 | 275 |  | 10 | 35 |
| < 5 |  | 989 | 25.1 |  | 12 | 1120 |  | 6 | 36 |
|  | 7 | 875 | 17.6 |  | 14 | 2050 |  | 5 | 36 |
|  | 6 | 1200 | 11.4 | $<10$ |  | 2370 |  | 8 | 20 |
|  | 5 | 572 | 18.2 | $<10$ |  | 1870 |  | 7 | 47 |
| $<5$ |  | 497 | 18.1 |  | 12 | 1580 |  | 9 | 37 |
| $<5$ |  | 268 | 14 |  | 19 | 1810 |  | 8 | 21 |
| < 5 |  | 759 | 13.3 |  | 11 | 2070 |  | 7 | 34 |
| < 5 |  | 549 | 19.1 | $<10$ |  | 1090 |  | 7 | 44 |
| < 5 |  | 759 | 19.4 |  | 11 | 1370 | $<5$ |  | 46 |
| $<5$ |  | 626 | 18.9 | $<10$ |  | 687 | < 5 |  | 58 |
| < 5 |  | 656 | 19.1 |  | 11 | 388 |  | 6 | 55 |
| $<5$ |  | 747 | 20 |  | 12 | 521 |  | 5 | 55 |
| $<5$ |  | 790 | 15.9 |  | 16 | 955 | $<5$ |  | 50 |
|  | 7 | 387 | 12.9 |  | 32 | 905 |  | 9 | 32 |
| $<5$ |  | 990 | 15 |  | 27 | 1010 |  | 7 | 50 |
| < 5 |  | 1110 | 12.3 |  | 24 | 478 |  | 7 | 56 |
| < 5 |  | 495 | 14.5 |  | 24 | 801 |  | 7 | 24 |
| < 5 |  | 866 | 11.8 |  | 23 | 483 |  | 7 | 31 |
| <5 |  | 916 | 16.5 |  | 28 | 311 |  | 9 | 38 |
| < 5 |  | 760 | 15.2 | $<10$ |  | 38 |  | 8 | 12 |
| < 5 |  | 750 | 19.5 | $<10$ |  | 47 | $<5$ |  | 23 |
| < 5 |  | 421 | 18.5 | <10 |  | 869 | <5 |  | 31 |
| <5 |  | 694 | 26.7 |  | 10 | 304 |  | 6 | 25 |
|  | 5 | 242 | 14.4 |  | 18 | 1800 |  | 10 | 21 |
| $<5$ |  | 879 | 13.4 |  | 23 | 483 |  | 8 | 32 |

## DIAMOND DRILL HOLE X-SECTION DIAGRAMS

## Au (ppb) Histogram

## D.D.H. \#

GL-88-01
GL-88-02
GL-88-03
GL-88-04
GL-88-05
GL-88-06
GL-88-07
GL-88-08
GL-88-09
GL-88-10
R90-01
R90-02
R90-03

Grid Location

L38+94E-2+89N
L34+92E-3+26N
L24+85E-0+00N
L36+00E-1+00S
L21+11E-1+05S
L31+00E-0+40S
L28+02E-0+25S
L28+00E-0+25S
L14+91E-1+00N
L22+92E-4+54S
L14+00E-1+85N
L19+00E-BL0+00
L39+00E-1+60S














# DIAMOND DRILL HOLE X-SECTION DIAGRAMS 

Cu (ppm) Histogram

## D.D.H. \#

GL-88-01
GL-88-02
GL-88-03
GL-88-04
GL-88-05
GL-88-06
GL-88-07
GL-88-08
GL-88-09
GL-88-10
R90-01
R90-02
R90-03

Grid Location
L38+94E-2+89N
L34+92E-3+26N
L24+85E-0+00N
L36+00E-1+00S
L21+11E-1+05S
L31+00E-0+40S
L28+02E-0+25S
L28+00E-0+25S
L14+91E-1+00N
L22+92E-4+54S
L14+00E-1+85N
L19+00E-BL0+00
L39+00E-1+60S










## Problem Page

The original page in this document had a problem when scanned and as a result was unable to convert to Portable Document Format (PDF).

We apologize for the inconvenience.

## Problème de conversion de page

Un problème est survenu au moment de balayer la page originale dans ce document. La page n'a donc pu être convertie en format PDF.

Nous regrettons tout inconvénient occasionné par ce problème.


TIF_JPG_Conversion_Failure_Bad_Header_MNDM111x1




# DIAMOND DRILL HOLE X-SECTION DIAGRAMS 

for<br>D.D.H. \# GL-88-04<br>Grid Location L36+00E-1+00S

ADDITION ANALYSIS

Zn (Zinc) in ppm K2O in \%
MgO in \%
SiO2 \%





## CERTIFICATE OF ANALYSIS

## Work Order: 073980

To: Emerald Fields Resources Corporation
Attn: Al Mowat Date : 10/09/03
1546 Pine Portage Rd.
KENORA
ONTARIO/CANADA/P9N 2K2

## Copy 1 to

P.O. No.

Project No.
No. of Samples
Date Submitted
Report Comprises
: BRIDGES-VMS 29 Core 20/08/03
Cover Sheet plus
Pages 1 to 8

Distribution of unused material:
Pulps: $\quad$ Discarded After 90 Days Unless Instructed!!!
Rejects: Discarded After 90 Days Unless Instructed!!!


ISO 9002 REGISTERED
ISO 17025 Accredited for Specific Tests. SCC No. 456

| Report Footer: | L.N.R. | $=$ Listed not received | I.S. | $=$ Insufficient Sample |
| :---: | :---: | :---: | :---: | :---: |
|  | n.a. | $=$ Not applicable | -- | $=$ No result |
|  | * ${ }^{\text {NF }}$ | $=$ Composition of this | ction | ssible by this method |
|  | $M$ afte | sult denotes ppb to p | te | to \% conversion |

## Subject to SGS General Terms and Conditions

Work Order: 073980
Date: 10/09/03
FINAL
Page 1 of 8

| Element. <br> Method. | $\begin{array}{r} \mathrm{SiO} 2 \\ \times R F 102 \end{array}$ | $\begin{array}{r} \text { Al2O3 } \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{CaO} \\ \times R F 102 \end{array}$ | $\begin{array}{r} \mathrm{MgO} \\ \times R F 102 \end{array}$ | $\begin{array}{r} \mathrm{Na} 2 \mathrm{O} \\ \times R F 102 \end{array}$ | $\begin{array}{r} \mathrm{K} 2 \mathrm{O} \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{Fe} 2 \mathrm{O} 3 \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{MnO} \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{TiO} 2 \\ \times R \mathrm{~F} 102 \end{array}$ | $\begin{array}{r} \mathrm{P} 2 \mathrm{O} 5 \\ \times R F 102 \end{array}$ | $\begin{array}{r} \mathrm{Cr} 2 \mathrm{O} 3 \\ \mathrm{XRF} 102 \end{array}$ | $\begin{array}{r} \text { LOI } \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \text { Sum } \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{Rb} \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} \mathrm{Sr} \\ \text { XRF102 } \end{array}$ | $\begin{array}{r} Y \\ \text { XRF102 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Det.Lim. | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 2 | 2 | 2 |
| Units. | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | $\%$ | \% | ppm | ppm | ppm |
| EF-GL-88-04-01 | 64.90 | 16.08 | 5.97 | 1.38 | 0.88 | 3.47 | 5.17 | 0.30 | 0.50 | 0.15 | 0.02 | 1.00 | 99.96 | 92 | 364 | 8 |
| EF-GL-88-04-02 | 64.56 | 15.66 | 5.08 | 1.81 | 2.77 | 2.78 | 4.46 | 0.12 | 0.49 | 0.13 | 0.03 | 0.90 | 98.96 | 76 | 493 | 11 |
| EF-GL-88-04-03 | 62.16 | 15.67 | 4.53 | 2.30 | 2.01 | 4.60 | 5.55 | 0.22 | 0.50 | 0.14 | 0.02 | 1.65 | 99.54 | 119 | 479 | 10 |
| EF-GL-88-04-04 | 65.59 | 15.51 | 3.39 | 1.67 | 2.56 | 3.67 | 4.76 | 0.21 | 0.43 | 0.13 | 0.04 | 1.35 | 99.49 | 88 | 348 | 7 |
| EF-GL-88-04-05 | 63.23 | 15.95 | 5.13 | 2.65 | 0.21 | 4.66 | 4.84 | 0.25 | 0.50 | 0.14 | 0.02 | 2.10 | 99.82 | 116 | 147 | 11 |
| EF-GL-88-04-06 | 56.52 | 18.18 | 1.58 | 1.02 | 0.44 | 10.21 | 5.79 | 1.64 | 0.65 | 0.21 | 0.03 | 1.80 | 98.35 | 247 | 163 | 12 |
| EF-GL-88-04-07 | 56.65 | 18.12 | 2.44 | 1.07 | 0.68 | 8.74 | 4.78 | 3.25 | 0.55 | 0.19 | 0.02 | 1.00 | 97.73 | 202 | 151 | 13 |
| EF-GL-88-04-08 | 60.22 | 16.61 | 1.69 | 0.86 | 0.26 | 6.56 | 4.33 | 2.31 | 0.50 | 0.15 | 0.04 | 2.20 | 95.88 | 182 | 115 | 12 |
| EF-GL-88-04-09 | 60.65 | 15.59 | 0.69 | 0.73 | $<0.01$ | 6.48 | 3.89 | 3.04 | 0.46 | 0.12 | 0.04 | 2.80 | 94.53 | 183 | 88 | 8 |
| EF-GL-88-04-10 | 65.88 | 14.12 | 0.54 | 0.53 | $<0.01$ | 6.28 | 2.64 | 3.05 | 0.28 | 0.09 | 0.05 | 2.00 | 95.55 | 183 | 79 | 10 |
| EF-GL-88-04-11 | 59.56 | 15.72 | 0.78 | 1.14 | $<0.01$ | 6.36 | 3.78 | 2.71 | 0.45 | 0.11 | 0.04 | 3.10 | 93.70 | 204 | 78 | 11 |
| EF-GL-88-04-12 | 56.97 | 15.47 | 0.84 | 1.09 | $<0.01$ | 5.95 | 4.20 | 4.40 | 0.44 | 0.11 | 0.05 | 3.00 | 92.64 | 191 | 80 | 10 |
| EF-GL-88-04-13 | 57.20 | 13.08 | 0.69 | 0.80 | $<0.01$ | 5.52 | 6.04 | 3.60 | 0.35 | 0.12 | 0.04 | 2.80 | 89.69 | 174 | 77 | 9 |
| EF-GL-88-04-14 | 63.39 | 14.46 | 1.06 | 0.94 | $<0.01$ | 5.72 | 3.90 | 2.87 | 0.30 | 0.10 | 0.05 | 2.20 | 95.18 | 173 | 107 | 9 |
| EF-GL-88-04-15 | 64.65 | 16.70 | 2.06 | 1.00 | $<0.01$ | 2.58 | 3.97 | 2.29 | 0.38 | 0.10 | 0.04 | 2.40 | 96.11 | 88 | 96 | 11 |
| EF-GL-88-04-16 | 65.61 | 15.46 | 1.86 | 1.69 | 0.31 | 5.14 | 4.54 | 1.23 | 0.45 | 0.11 | 0.04 | 1.95 | 98.52 | 196 | 95 | 11 |
| EF-GL-88-04-17 | 66.18 | 15.37 | 2.30 | 1.58 | 0.32 | 5.40 | 4.58 | 1.00 | 0.43 | 0.11 | 0.03 | 1.65 | 99.04 | 177 | 102 | 11 |
| EF-GL-88-04-18 | 65.59 | 15.86 | 3.39 | 1.88 | 0.37 | 5.23 | 4.44 | 0.71 | 0.43 | 0.11 | 0.04 | 1.60 | 99.77 | 172 | 131 | 8 |
| EF-GL-88-04-19 | 66.33 | 14.85 | 2.54 | 1.69 | 0.27 | 5.13 | 4.93 | 0.95 | 0.45 | 0.11 | 0.03 | 1.65 | 99.05 | 152 | 132 | 9 |
| EF-GL-88-04-20 | 62.49 | 14.73 | 0.66 | 1.83 | $<0.01$ | 5.78 | 7.29 | 0.82 | 0.41 | 0.11 | 0.04 | 3.50 | 97.73 | 156 | 94 | 6 |
| EF-GL-88-04-21 | 55.88 | 12.95 | 0.39 | 1.06 | $<0.01$ | 4.70 | 9.86 | 0.82 | 0.40 | 0.08 | 0.04 | 5.00 | 89.98 | 110 | 75 | 5 |
| EF-GL-88-04-22 | 59.46 | 14.35 | 0.63 | 2.29 | $<0.01$ | 5.58 | 10.57 | 1.59 | 0.40 | 0.11 | 0.05 | 1.75 | 96.64 | 138 | 85 | 6 |
| EF-GL-88-04-23 | 57.19 | 14.28 | 1.01 | 2.42 | $<0.01$ | 5.38 | 10.42 | 1.58 | 0.40 | 0.12 | 0.04 | 1.60 | 94.09 | 136 | 87 | 7 |
| EF-GL-88-04-24 | 60.80 | 14.40 | 0.49 | 1.15 | $<0.01$ | 4.26 | 10.63 | 1.66 | 0.41 | 0.11 | 0.05 | 3.00 | 96.58 | 88 | 47 | 7 |
| EF-GL-88-04-25 | 60.63 | 14.20 | 0.79 | 1.59 | $<0.01$ | 5.04 | 9.54 | 2.35 | 0.37 | 0.14 | 0.04 | 1.20 | 95.71 | 110 | 48 | 9 |
| EF-GL-88-04-26 | 59.11 | 14.86 | 0.61 | 1.54 | $<0.01$ | 6.18 | 11.53 | 2.14 | 0.41 | 0.11 | 0.05 | 1.00 | 97.63 | 133 | 47 | 8 |
| EF-GL-88-04-27 | 59.90 | 16.25 | 2.58 | 1.11 | 0.56 | 5.38 | 2.85 | 6.02 | 0.41 | 0.12 | 0.04 | 0.40 | 95.74 | 120 | 78 | 12 |
| EF-GL-88-04-28 | 62.77 | 15.60 | 6.11 | 3.15 | 1.00 | 4.26 | 4.54 | 0.98 | 0.44 | 0.12 | 0.05 | 0.40 | 99.55 | 120 | 212 | 11 |
| EF-GL-88-04-29 | 68.85 | 15.25 | 3.57 | 1.42 | 0.43 | 3.78 | 3.47 | 1.29 | 0.34 | 0.11 | 0.02 | 0.70 | 99.32 | 87 | 92 | 7 |
| *Dup EF-GL-88-04-01 | 65.04 | 16.07 | 5.96 | 1.38 | 0.88 | 3.47 | 5.17 | 0.30 | 0.50 | 0.15 | 0.02 | 1.00 | 100.1 | 91 | 366 | 8 |

## SGS

Work Order: 073980
Date: 10/09/03
FINAL
Page 2 of 8

| Element. | SiO 2 | $\mathrm{Al2O} 3$ | CaO | MgO | Na 2 O | K20 | Fe 2 O 3 | MnO | TiO 2 | P2O5 | Cr 2 O 3 | LOI | Sum | b | Sr | Y |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Method. | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 | XRF102 |
| Det.Lim. | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 2 | 2 | 2 |
| Units. | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% | $\%$ | \% | \% | ppm | ppmı | ppin |
| *Dup EF-GL-88-04-13 | 57.33 | 13.13 | 0.69 | 0.80 | $<0.01$ | 5.51 | 6.04 | 3.58 | 0.35 | 0.12 | 0.04 | 2.90 | 89.93 | 173 | 79 | 7 |
| *Dup EF-GL-88-04-25 | 60.63 | 14.21 | 0.79 | 1.59 | <0.01 | 5.06 | 9.55 | 2.35 | 0.37 | 0.14 | 0.04 | 1.20 | 95.75 | 110 | 48 | 9 |

Work Order: 073980
Date: 10/09/03
FINAL
Paqe 3 of 8

| Element. | Zr | Nb | Ba | Be | Na | Mg | Al | P | K | Ca | Sc | Ti | V | Cr | Mn | Fe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Method. | XRF102 | XRF102 | XRF102 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 |
| Det.Lim. | 2 | 2 | 20 | 0.5 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.5 | 0.01 | 2 | 1 | 2 | 0.01 |
| Units. | ppm | ppm | ppm | ppm | \% | \% | \% | \% | \% | \% | ppm | \% | ppm | ppm | ppm | $\%$ |
| EF-GL-88-04-01 | 84 | 6 | 687 | $<0.5$ | 0.70 | 0.87 | 8.60 | 0.07 | 3.14 | 4.61 | 10.1 | 0.32 | 97 | 102 | 2120 | 3.61 |
| EF-GL-88-04-02 | 107 | 6 | 877 | $<0.5$ | 2.08 | 1.08 | 8.20 | 0.06 | 2.49 | 3.68 | 7.2 | 0.36 | 78 | 146 | 858 | 2.99 |
| EF-GL-88-04-03 | 90 | 6 | 1000 | $<0.5$ | 1.50 | 1.38 | 7.99 | 0.07 | 4.02 | 3.35 | 10.1 | 0.37 | 96 | 98 | 1620 | 3.75 |
| EF-GL-88-04-04 | 89 | 6 | 981 | $<0.5$ | 1.93 | 1.00 | 7.94 | 0.06 | 3.21 | 2.46 | 6.3 | 0.30 | 69 | 140 | 1480 | 3.20 |
| EF-GL-88-04-05 | 91 | 5 | 780 | $<0.5$ | 0.16 | 1.57 | 8.09 | 0.07 | 3.98 | 3.75 | 10.0 | 0.36 | 96 | 82 | 1730 | 3.29 |
| EF-GL-88-04-06 | 123 | 5 | 1830 | $<0.5$ | 0.37 | 0.63 | 9.54 | 0.10 | 9.22 | 1.25 | 11.8 | 0.49 | 116 | 140 | $>10000$ | 4.46 |
| EF-GL-88-04-07 | 109 | 6 | 1780 | $<0.5$ | 0.46 | 0.60 | 8.73 | 0.08 | 7.25 | 1.73 | 9.6 | 0.37 | 94 | 107 | $>10000$ | 4.00 |
| EF-GL-88-04-08 | 105 | 7 | 990 | $<0.5$ | 0.42 | 0.52 | 7.66 | 0.07 | 5.66 | 1.26 | 9.7 | 0.21 | 72 | 168 | $>10000$ | 3.60 |
| EF-GL-88-04-09 | 105 | 6 | 1240 | 0.5 | 0.34 | 0.42 | 6.84 | 0.06 | 5.35 | 0.49 | 7.4 | 0.07 | 61 | 197 | $>10000$ | 3.47 |
| EF-GL-88-04-10 | 75 | 7 | 1170 | $<0.5$ | 0.30 | 0.30 | 6.50 | 0.04 | 5.56 | 0.39 | 6.2 | 0.06 | 43 | 185 | $>10000$ | 2.80 |
| EF-GL-88-04-11 | 114 | 8 | 1490 | 1.1 | 0.33 | 0.66 | 7.33 | 0.05 | 5.32 | 0.58 | 8.2 | 0.10 | 60 | 151 | $>10000$ | 3.45 |
| EF-GL-88-04-12 | 112 | 8 | 1420 | $<0.5$ | 0.31 | 0.68 | 7.32 | 0.06 | 5.27 | 0.64 | 9.6 | 0.12 | 72 | 265 | $>10000$ | 4.32 |
| EF-GL-88-04-13 | 100 | 6 | 1690 | $<0.5$ | 0.25 | 0.46 | 5.97 | 0.06 | 4.67 | 0.49 | 6.5 | 0.12 | 50 | 231 | $>10000$ | 5.14 |
| EF-GL-88-04-14 | 83 | 7 | 1570 | 0.8 | 0.34 | 0.54 | 6.34 | 0.05 | 4.74 | 0.75 | 5.3 | 0.08 | 39 | 183 | $>10000$ | 3.45 |
| EF-GL-88-04-15 | 81 | 9 | 571 | 1.0 | 0.27 | 0.60 | 5.77 | 0.05 | 2.33 | 1.50 | 7.8 | 0.12 | 56 | 178 | $>10000$ | 3.34 |
| EF-GL-88-04-16 | 107 | 8 | 740 | $<0.5$ | 0.29 | 1.02 | 7.07 | 0.05 | 4.50 | 1.41 | 6.2 | 0.21 | 62 | 176 | 8660 | 3.46 |
| EF-GL-88-04-17 | 97 | 8 | 578 | 0.7 | 0.36 | 0.99 | 7.59 | 0.06 | 4.82 | 1.79 | 6.0 | 0.22 | 59 | 126 | 7400 | 3.50 |
| EF-GL-88-04-18 | 100 | 7 | 667 | $<0.5$ | 0.33 | 1.16 | 8.06 | 0.05 | 4.64 | 2.60 | 5.4 | 0.29 | 64 | 172 | 5020 | 3.23 |
| EF-GL-88-04-19 | 100 | 7 | 725 | $<0.5$ | 0.30 | 1.05 | 7.53 | 0.05 | 4.48 | 1.94 | 5.8 | 0.21 | 64 | 123 | 6920 | 3.66 |
| EF-GL-88-04-20 | 107 | 5 | 946 | $<0.5$ | 0.17 | 1.06 | 6.67 | 0.05 | 4.91 | 0.50 | 6.6 | 0.26 | 65 | 210 | 5720 | 4.90 |
| EF-GL-88-04-21 | 101 | 4 | 794 | 0.6 | 0.15 | 0.62 | 5.40 | 0.04 | 3.83 | 0.27 | 6.0 | 0.20 | 54 | 140 | 5540 | 6.48 |
| EF-GL-88-04-22 | 98 | 5 | 1000 | $<0.5$ | 0.16 | 1.36 | 6.31 | 0.05 | 5.05 | 0.48 | 7.0 | 0.28 | 58 | 227 | $>10000$ | 6.93 |
| EF-GL-88-04-23 | 97 | 6 | 1090 | $<0.5$ | 0.13 | 1.41 | 6.15 | 0.05 | 4.69 | 0.64 | 7.3 | 0.27 | 63 | 190 | $>10000$ | 6.69 |
| EF-GL-88-04-24 | 97 | 4 | 537 | $<0.5$ | 0.13 | 0.59 | 4.96 | 0.05 | 3.67 | 0.35 | 7.6 | 0.20 | 50 | 236 | $>10000$ | 6.43 |
| EF-GL-88-04-25 | 89 | 6 | 856 | $<0.5$ | 0.14 | 0.90 | 6.03 | 0.06 | 4.37 | 0.57 | 7.7 | 0.26 | 58 | 197 | $>10000$ | 6.41 |
| EF-GL-88-04-26 | 98 | 4 | 885 | $<0.5$ | 0.18 | 0.97 | 7.17 | 0.05 | 5.59 | 0.47 | 7.5 | 0.31 | 70 | 270 | $>10000$ | 7.69 |
| EF-GL-88-04-27 | 95 | 6 | 808 | $<0.5$ | 0.41 | 0.64 | 7.56 | 0.05 | 4.60 | 1.83 | 8.5 | 0.19 | 69 | 198 | $>10000$ | 3.53 |
| EF-GL-88-04-28 | 89 | 8 | 744 | $<0.5$ | 0.80 | 2.03 | 8.45 | 0.06 | 3.94 | 4.78 | 10.0 | 0.33 | 87 | 221 | 7230 | 3.45 |
| EF-GL-88-04-29 | 85 | 5 | 450 | $<0.5$ | 0.47 | 0.88 | 7.57 | 0.05 | 3.36 | 2.74 | 4.2 | 0.15 | 42 | 95 | 9210 | 2.75 |
| *Dup EF-GL-88-04-01 | 84 | 6 | 685 | $<0.5$ | 0.65 | 0.86 | 8.41 | 0.07 | 3.03 | 4.51 | 9.9 | 0.32 | 95 | 98 | 2110 | 3.53 |

Work Order: 073980
Date: 10/09/03
FINAL

| Element. | Zr | Nb | Ba | Be | Na | Mg | Al | P | K | Ca | Sc | Ti | V | Cr | Mı | Fe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Method. | XRF102 | XRF102 | XRF102 | 1CP80 | ICP80 | ICP80 | ICP80 | ICP80 | [CP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 |
| Det.Lim. | 2 | 2 | 20 | 0.5 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.5 | 0.01 | 2 | 1 | 2 | 0.01 |
| Units. | ppm | ppm | ppm | ppm | \% | \% | \% | \% | \% | \% | ppm | \% | ppm | ppin | ppm | \% |
| *Dup EF-GL-88-04-13 | 100 | 5 | 1690 | $<0.5$ | 0.24 | 0.47 | 6.05 | 0.06 | 4.75 | 0.49 | 6.6 | 0.12 | 51 | 258 | $>10000$ | 5.13 |
| *Dup EF-GL-88-04-25 | 90 | 6 | 858 | $<0.5$ | 0.14 | 0.92 | 6.11 | 0.07 | 4.42 | 0.58 | 7.7 | 0.26 | 59 | 198 | $>10000$ | 6.46 |

Work Order: 073980

Date: 10/09/03
FINAL

| Ni | Cu | Zn | As | Sr | Y | Zr | Mo | Ag | Cd | Sn | Sb | Ba | La | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | $1 \mathrm{CP80}$ | ICP80 | ICP80 | ICP80 |
| 1 | 0.5 | 0.5 | 3 | 0.5 | 0.5 | 0.5 | 1 | 0.2 | 1 | 10 | 5 | 1 | 0.5 | 10 |
| ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| 23 | 112 | 609 | 4 | 373 | 7.2 | 56.4 | 2 | 3.5 | 5 | $<10$ | $<5$ | 704 | 26.9 | $<10$ |
| 14 | 18.2 | 1140 | 4 | 480 | 6.9 | 56.9 | 5 | 1.6 | 6 | $<10$ | $<5$ | 862 | 18.1 | $<10$ |
| 27 | 22.7 | 92.5 | $<3$ | 487 | 7.2 | 47.4 | 2 | 0.7 | $<1$ | $<10$ | $<5$ | 1000 | 22.2 | 10 |
| 20 | 236 | 379 | $<3$ | 342 | 5.4 | 56.2 | 7 | 4.9 | $<1$ | $<10$ | $<5$ | 1040 | 19.7 | $<10$ |
| 24 | 27.5 | 155 | $<3$ | 144 | 7.1 | 60.6 | 1 | 1.6 | $<1$ | $<10$ | $<5$ | 756 | 23.5 | $<10$ |
| 54 | 113 | 2700 | 4 | 192 | 8.7 | 79.1 | 3 | $>10.0$ | 6 | $<10$ | $<5$ | 1960 | 29.4 | 14 |
| 43 | 59.4 | 902 | 5 | 160 | 8.5 | 69.3 | 2 | 8.3 | 2 | $<10$ | $<5$ | 1730 | 26.2 | 14 |
| 39 | 146 | 6070 | $<3$ | 117 | 7.4 | 46.6 | 3 | $>10.0$ | 19 | $<10$ | $<5$ | 989 | 25.1 | 12 |
| 50 | 224 | $>10000$ | $<3$ | 88.5 | 4.9 | 36.0 | 2 | $>10.0$ | 37 | $<10$ | 7 | 875 | 17.6 | 14 |
| 33 | 186 | 8680 | $<3$ | 80.2 | 4.8 | 28.5 | 4 | $>10.0$ | 26 | $<10$ | 6 | 1200 | 11.4 | $<10$ |
| 46 | 225 | $>10000$ | 3 | 83.8 | 6.4 | 44.5 | 3 | $>10.0$ | 39 | $<10$ | 5 | 572 | 18.2 | $<10$ |
| 62 | 135 | $>10000$ | $<3$ | 85.7 | 7.7 | 42.9 | 3 | $>10.0$ | 30 | $<10$ | $<5$ | 497 | 18.1 | 12 |
| 60 | 309 | $>10000$ | $<3$ | 82.4 | 5.4 | 46.2 | 4 | $>10.0$ | 64 | $<10$ | $<5$ | 268 | 14.0 | 19 |
| 38 | 87.8 | 9660 | $<3$ | 110 | 3.9 | 30.6 | 3 | $>10.0$ | 25 | $<10$ | $<5$ | 759 | 13.3 | 11 |
| 32 | 90.1 | 9300 | 4 | 91.1 | 8.2 | 43.0 | 3 | $>10.0$ | 29 | $<10$ | $<5$ | 549 | 19.1 | $<10$ |
| 19 | 141 | 1440 | $<3$ | 94.1 | 5.7 | 38.5 | 5 | $>10.0$ | 2 | $<10$ | $<5$ | 759 | 19.4 | 11 |
| 19 | 188 | 1650 | $<3$ | 107 | 5.9 | 50.6 | 5 | $>10.0$ | 8 | $<10$ | $<5$ | 626 | 18.9 | $<10$ |
| 17 | 173 | 456 | $<3$ | 135 | 4.7 | 56.4 | 5 | $>10.0$ | 3 | $<10$ | $<5$ | 656 | 19.1 | 11 |
| 20 | 231 | 1110 | $<3$ | 137 | 5.2 | 48.1 | 6 | $>10.0$ | 6 | $<10$ | $<5$ | 747 | 20.0 | 12 |
| 42 | 118 | 1780 | 3 | 95.3 | 3.8 | 43.1 | 4 | $>10.0$ | 3 | $<10$ | $<5$ | 790 | 15.9 | 16 |
| 53 | 168 | $>10000$ | 3 | 76.2 | 3.5 | 32.0 | 4 | $>10.0$ | 112 | $<10$ | 7 | 387 | 12.9 | 32 |
| 57 | 75.0 | 2370 | $<3$ | 88.5 | 4.4 | 42.1 | 2 | $>10.0$ | 30 | $<10$ | $<5$ | 990 | 15.0 | 27 |
| 57 | 31.3 | 6450 | $<3$ | 81.6 | 5.0 | 51.4 | 2 | $>10.0$ | 34 | $<10$ | $<5$ | 1110 | 12.3 | 24 |
| 62 | 106 | 2200 | $<3$ | 43.0 | 4.8 | 43.3 | 2 | $>10.0$ | 8 | $<10$ | $<5$ | 495 | 14.5 | 24 |
| 60 | 48.6 | 1970 | $<3$ | 47.6 | 5.5 | 47.5 | 2 | $>10.0$ | 26 | $<10$ | $<5$ | 866 | 11.8 | 23 |
| 62 | 48.7 | 1080 | $<3$ | 48.1 | 5.9 | 44.7 | 2 | $>10.0$ | 16 | $<10$ | $<5$ | 916 | 16.5 | 28 |
| 75 | 10.8 | 449 | $<3$ | 78.6 | 5.7 | 53.6 | 2 | $<0.2$ | $<1$ | $<10$ | $<5$ | 760 | 15.2 | $<10$ |
| 97 | 11.3 | 578 | $<3$ | 217 | 6.3 | 48.6 | 2 | 1.5 | $<1$ | $<10$ | $<5$ | 750 | 19.5 | $<10$ |
| 13 | 34.9 | 781 | $<3$ | 91.8 | 4.7 | 49.2 | 2 | 5.0 | 8 | $<10$ | $<5$ | 421 | 18.5 | $<10$ |
| 22 | 110 | 573 | 3 | 361 | 7.0 | 55.7 | 2 | 3.1 | 4 | $<10$ | $<5$ | 694 | 26.7 | 10 |

## SGS

Work Order: 073980

## Element

Method.
Det.Lim. Units.
*Dup EF-GL-88-04-13
*Dup EF-GL-88-04-25

Date: 10/09/03
$\begin{array}{rrrrr}\text { Co } & \mathrm{Ni} & \mathrm{Cu} & \mathrm{Zn} & \text { As } \\ \text { ICP80 } & \text { ICP80 } & \text { ICP80 } & \text { ICP80 } & \text { ICP80 } \\ \mathbf{1} & \mathbf{1} & 0.5 & 0.5 & \mathbf{3} \\ \text { ppm } & \text { ppm } & \mathrm{ppm} & \text { ppm } & \text { ppm } \\ 11 & & & & \\ 10 & 60 & 307 & >10000 & <3 \\ & 60 & 50.2 & 1970 & <3\end{array}$

FINAL
Page 6 of 3

| Sr | Y | Zr | Mo | Ag | Cd | Sn | Sb | Ba | La | W |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 | ICP80 |
| 0.5 | 0.5 | 0.5 | 1 | 0.2 | 1 | 10 | 5 | 1 | 0.5 | 10 |
| ppm | ppm | ppm | ppm | ppm | ppin | ppm | ppm | ppin | ppm | ppm |
| 82.2 | 5.5 | 46.1 | 4 | $>10.0$ | 66 | $<10$ | 5 | 242 | 14.4 | 18 |
| 48.0 | 5.5 | 49.4 | 1 | $>10.0$ | 27 | $<10$ | $<5$ | 879 | 13.4 | 23 |

Work Order: 073980

| Element. | Pb | Bi | Li |
| :---: | :---: | :---: | :---: |
| Method. | ICP80 | ICP80 | ICP80 |
| Det.Lim. | 2 | 5 | 1 |
| Units. | ppm | ppm | ppm |
| EF-GL-88-04-01 | 313 | 6 | 26 |
| EF-GL-88-04-02 | 36 | 5 | 57 |
| EF-GL-88-04-03 | 15 | 6 | 50 |
| EF-GL-88-04-04 | 74 | $<5$ | 34 |
| EF-GL-88-04-05 | 17 | $<5$ | 85 |
| EF-GL-88-04-06 | 744 | 10 | 27 |
| EF-GL-88-04-07 | 275 | 10 | 35 |
| EF-GL-88-04-08 | 1120 | 6 | 36 |
| EF-GL-88-04-09 | 2050 | 5 | 36 |
| EF-GL-88-04-10 | 2370 | 8 | 20 |
| EF-GL-88-04-11 | 1870 | 7 | 47 |
| EF-GL-88-04-12 | 1580 | 9 | 37 |
| EF-GL-88-04-13 | 1810 | 8 | 21 |
| EF-GL-88-04-14 | 2070 | 7 | 34 |
| EF-GL-88-04-15 | 1090 | 7 | 44 |
| EF-GL-88-04-16 | 1370 | $<5$ | 46 |
| EF-GL-88-04-17 | 687 | $<5$ | 58 |
| EF-GL-88-04-18 | 388 | 6 | 55 |
| EF-GL-88-04-19 | 521 | 5 | 55 |
| EF-GL-88-04-20 | 955 | $<5$ | 50 |
| EF-GL-88-04-21 | 905 | 9 | 32 |
| EF-GL-88-04-22 | 1010 | 7 | 50 |
| EF-GL-88-04-23 | 478 | 7 | 56 |
| EF-GL-88-04-24 | 801 | 7 | 24 |
| EF-GL-88-04-25 | 483 | 7 | 31 |
| EF-GL-88-04-26 | 311 | 9 | 38 |
| EF-GL-88-04-27 | 38 | 8 | 12 |
| EF-GL-88-04-28 | 47 | <5 | 23 |
| EF-GL-88-04-29 | 869 | $<5$ | 31 |
| *Dup EF-GL-88-04-01 | 304 | 6 | 25 |

Work Order: 073980
Date: 10/09/03
FINAL
Page 8 of 8

| Element. | $\mathbf{P b}$ | Bi | $\mathbf{L i}$ |
| :--- | ---: | ---: | ---: |
| Method. | ICP80 | ICP80 | ICP80 |
| Det.Lim. | $\mathbf{2}$ | $\mathbf{5}$ | $\mathbf{1}$ |
| Units. | $\mathbf{p p m}$ | $\mathbf{p p m}$ | $\mathbf{p p m}$ |
| $\quad$ |  |  |  |
| $\quad$ *Dup EF-GL-88-04-13 | 1800 | 10 | 21 |
| $\quad$ *Dup EF-GL-88-04-25 | 483 | 8 | 32 |

## Work Report Summary

Transaction No: W0310.01303
Recording Date: 2003-AUG-25
Approval Date: 2004-JAN-23

Status: APPROVED
Work Done from: 2003-MAY-05
to: 2003-AUG-17

Client(s):
303602 EMERALD FIELDS RESOURCE CORPORATION
Survey Type(s):
ASSAY GEOL

|  |  | ASSAY | GEOL |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Work Report Details: |  |  |  |  |  |  |  |  |  |
| Claim\# | Perform | Perform Approve | Applied | Applied Approve | Assign | Assign Approve | Reserve | Reserve Approve | Due Date |
| K 1221211 | \$921 | \$651 | \$1,200 | \$1,200 | \$0 | 0 | \$0 |  | 2004-AUG-20 |
| K 1221212 | \$5,911 | \$4,177 | \$2,400 | \$1,431 | \$1,395 | 2,746 | \$2,116 | \$0 | 2003-AUG-20 |
| K 1221214 | \$2,456 | \$1,736 | \$3,200 | \$3,200 | \$0 | 0 | \$0 |  | 2004-AUG-27 |
| K 1221215 | \$1,228 | \$867 | \$1,600 | \$1,600 | \$0 | 0 | \$0 |  | 2004-SEP-05 |
|  | \$10,516 | \$7,431 | \$8,400 | \$7,431 | \$1,395 | \$2,746 | \$2,116 | \$0 |  |

External Credits:
$\$ 0$
Reserve:
\$0 Reserve of Work Report\#: W0310.01303
\$0 Total Remaining

Status of claim is based on information currently on record.

52F13SE2005 2.26137 BRIDGES

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

Tel: (888) 415-9845
Fax:(877) 670-1555
1546 PINE PORTAGE RD., KENORA, ONTARIO
P9N 2K2 CANADA

Submission Number: 2.26137

## Dear Sir or Madam

## Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

The 45 days outlined in the Notice dated November 18, 2003 have passed. The additional information you have provided for this submission has corrected many of the deficiencies. However, the additional information has clarified that the GIS/MAPINFO cost of $(\$ 3,085.00)$ was for compilation purposes (i.e. production of coloured drill hole cross-sections). The costs for producing the compilation material is not eligible for assessment credit. Accordingly, this submission is being reduced by $\$ 3,085.00$. The TOTAL VALUE of assessment credit that has been approved, based on the information provided in this submission, is $\$ 7,431.00$. Allowable changes to your credit distribution can be made by contacting the Geoscience Assessment Office by Tuesday February 09,2003 otherwise assessment credit will be cut-back and distributed as outlined in Section \#6 of the Declaration of Assessment Work form.

Please note, there is no provision under the Mining Act and Regulations to extent the 45-day Notice period beyond 45 days. Please be aware of this for future submissions.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Ron C. Gashinski
Senior Manager, Mining Lands Section

Cc: Resident Geologist
Alasdair James Mowat (Agent)

## Assessment File Library

Emerald Fields Resource Corporation (Claim Holder)

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Emerald Fields Resource Corporation (Assessment Office)





